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PREFACE.

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[1] A full list of the chief Benefactors, with the purposes of their benefactions, is given at pages 751-762.

Expenditure of the University; an abstract of the proceedings of the University Court from 1st May 1894 to 1st May 1895; and a list of the University Societies.

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No. 57 (General No. 19) Regulations as to Bursaries, Scholarships, and Fellowships in Arts, Supplementary to Ordinance No. 11 . . . 17
No. 56 (Edinburgh No. 10—Regulations for Degrees in Medicine, Supplementary to Ordinance No. 16) 23
No. 135 (Edinburgh No. 23—Regulations for Degrees in Science in Public Health, Supplementary to Ordinance No. 35) 24

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The Calendar.

1895—OCTOBER, 31 DAYS.

1	Tu	ANNUS ACADEMICUS *begins. First day for payment of* MATRICULATION *fee. Practical Anatomy, and Public Health Laboratory Courses begin. Annual Inspection of Library. All Books to be returned before this date. Library closed for lending till 8th. Examinations in French and German for M.A. and L.A., and for B.L. Preliminary, on M.A. Standard begin.* See Time-Tables, pages 148 and 560, and Date of Entering, page 146.
2	W	*Last day for Names of Candidates for Degrees in Arts and Science, for B.L. Preliminary, on M.A. Standard, for L.A. Certificates (except as above), and for First Year Law Bursaries, to be given in, Certificates shown, and Fees paid.*
3	Th	
4	Fr	
5	Sa	
6	S	
7	M	
8	Tu	*Examinations for M.A., L.A., and for B.L. Preliminary on M.A. Standard continued.* See Time-Table, page 148.
9	W	
10	Th	*Examinations for Degrees in Science begin.* See Time-Table, page 448.
11	Fr	
12	Sa	
13	S	
14	M	*Meeting of University Court at* 4 P.M. *Appointment of University Lecturers and Assistants, and other Statutory duties.*

15	Tu	CLASSES IN THE FACULTIES OF ARTS, SCIENCE, LAW, AND MEDICINE OPEN. *Last day for entering Names for Second and Third Year Bursaries in Law. Last day for Names of Candidates for B.D. to be given in, Certificates shown, and Fees paid.*
16	W	
17	Th	
18	Fr	
19	Sa	*Meeting of Senatus Academicus at* 2 P.M.: *Standing Committees to be appointed.*
20	S	
21	M	CLASSES IN FACULTY OF MUSIC OPEN. *Last day for Names of Candidates for Examinations for Degrees in Law to be given in, Certificates shown, and Fees paid.*
22	Tu	*Examinations for B.D. begin.* See Time-Table, page 501.
23	W	
24	Th	
25	Fr	*Meeting of General Council, at 3 o'clock.*
26	Sa	
27	S	
28	M	*Examinations for Degrees in Law begin.* See Time-Table, page 560.
29	Tu	CLASSES IN FACULTY OF DIVINITY OPEN.
30	W	
31	Th	

1895—NOVEMBER, 30 DAYS.

1	Fr	
2	Sa	
3	S	
4	M	
5	Tu	
6	W	
7	Th	
8	Fr	*Examinations for Divinity Bursaries begin.*
9	Sa	
10	S	
11	M	Martinmas.
12	Tu	
13	W	*Certificates for Bursaries in Arts granted by Dean.*
14	Th	*Fellowships, Scholarships, Bursaries paid by Factor.*
15	Fr	
16	Sa	
17	S	
18	M	*Meeting of University Court at* 4 P.M. *Names of Class Assistants to be submitted for approval.*
19	Tu	
20	W	
21	Th	
22	Fr	
23	Sa	
24	S	
25	M	
26	Tu	
27	W	
28	Th	
29	Fr	
30	Sa	*Registration of Members of General Council for Register of* 1896 *ends. Meeting of Senatus Academicus at* 2 P.M.

1895—DECEMBER, 31 DAYS.

1	S	
2	M	
3	Tu	
4	W	
5	Th	
6	Fr	
7	Sa	
8	S	
9	M	
10	Tu	
11	W	
12	Th	
13	Fr	
14	Sa	*Meeting of Senatus at* 2 P.M.: (1) *Election of Managers for Royal Infirmary;* (2) *Report to Widows' Fund.*
15	S	
16	M	*Meeting of University Court at* 4 P.M.
17	Tu	
18	W	
19	Th	
20	Fr	*Classes meet for last time before Christmas Vacation.*
21	Sa	
22	S	
23	M	*Library, Reading Room, and University Offices open from* 10 A.M. *to* 1 P.M. *till 7th January. Closed on Saturdays. Reading Room, New Buildings, closed.*
24	Tu	
25	W	CHRISTMAS DAY.
26	Th	
27	Fr	
28	Sa	
29	S	
30	M	
31	Tu	

1896—JANUARY, 31 DAYS.

1	W	
2	Th	
3	Fr	
4	Sa	
5	S	
6	M	
7	Tu	*Classes meet after Christmas Vacation.*
8	W	
9	Th	
10	Fr	
11	Sa	
12	S	
13	M	*Meeting of University Court at* 4 P.M. *Appointment of Examiners.*
14	Tu	
15	W	
16	Th	
17	Fr	
18	Sa	
19	S	
20	M	*Meeting of University Court for hearing Registration Appeals, at* 4 P.M.
21	Tu	
22	W	
23	Th	
24	Fr	
25	Sa	*Meeting of Senatus Academicus at* 2 P.M.: (1) *Annual Report on University Library to be given in;* (2) *Names for Honorary Degrees to be proposed;* (3) *Arrangements for Winter and Summer Sessions,* 1896-97.
26	S	
27	M	
28	Tu	
29	W	
30	Th	
31	Fr	

1896—FEBRUARY, 29 DAYS.

1	Sa	
2	S	
3	M	
4	Tu	
5	W	
6	Th	
7	Fr	
8	Sa	
9	S	
10	M	*Holiday in Faculty of Arts.*
11	Tu	
12	W	
13	Th	
14	Fr	
15	Sa	
16	S	
17	M	*Meeting of University Court at* 4 P.M.
18	Tu	
19	W	
20	Th	
21	Fr	
22	Sa	
23	S	
24	M	
25	Tu	
26	W	
27	Th	
28	Fr	*Meeting of Senatus Academicus at* 2 P.M.: (1) *Report on Honorary Degrees in Divinity and Law*; (2) *Resolution to Elect Member of General Assembly.*
29	Sa	

1896—MARCH, 31 DAYS.

1	S	
2	M	
3	Tu	
4	W	
5	Th	
6	Fr	
7	Sa	
8	S	
9	M	*Last day for Names of Candidates for Examinations for Degrees in Law and Arts (Department of History and Law) to be given in, and Fees paid.*
10	Tu	
11	W	
12	Th	
13	Fr	*Last day for Names of Candidates for Degrees in Arts, for Schoolmaster's Diploma, for Literate in Arts, and for B.L. Preliminary on M.A. Standard (excepting as above), to be given in and Fees paid. Last day for names of Candidates for Scholarships in Arts and Science to be intimated.*
14	Sa	
15	S	
16	M	*Meeting of University Court at* 4 P.M. *Last day for Names for First Professional Examination in Medicine, and for Examinations for Degrees in Science to be given in, Certificates shown, and Fees paid. Examinations for M.A., for L.A., and for Degrees in Law begin.* See Time-Tables, pages 148 and 560.
17	Tu	
18	W	*Last day for Names for Preliminary Examination to be given in.*
19	Th	

20	Fr	CLASSES IN FACULTIES OF DIVINITY, LAW, AND MEDICINE CLOSE. *Last day for Names for Second and Third Professional Examinations in Medicine, and for Examinations for Degrees in Music, to be given in, Certificates shown, and Fees paid.*
21	Sa	*Practical Chemistry Examinations for Degrees in Arts, Science, and Medicine begin.*
22	S	
23	M	*First Professional Examination in Medicine, B.Sc. Examinations, and Science Subjects for M.A. begin.* See Time-Tables, pages 149, 448, 638, 656.
24	Tu	*Last day for Names to be given in, Certificates shown, and Fees paid for B.D. Examinations.*
25	W	*First Professional and Arts and Science Oral Examinations begin.*
26	Th	*Second Professional Examinations begin.* See Time-Tables, pages 638, 656.
27	Fr	CLASSES IN THE FACULTIES OF ARTS AND SCIENCE CLOSE. *Certificates for M.A. Examinations in April to be shown before 4 p.m. Second Professional Oral Examinations begin. Third Professional Examinations (New Regulations) begin.* See Time-Table, page 639. *Preliminary Examinations begin.* See Time-Table, page 145. *Examinations for M.A. with Honours, for Scholarships, and for Schoolmaster's Diploma begin.* See Time-Table, page 149.
28	Sa	*Meeting of Senatus Academicus at* 2 P.M.: (1) *Member of Assembly to be elected;* (2) *Acceptances of Honorary Degrees.*
29	S	
30	M	*Third Professional Oral Examinations begin.*
31	Tu	*B.D. Examinations begin.* See Time-Table, page 501.

1896—APRIL, 30 DAYS.

1	W	*Examinations for Degrees in Music begin.* See Time-Table, page 744.
2	Th	
3	Fr	GOOD FRIDAY. HOLIDAY.
4	Sa	
5	S	EASTER SUNDAY.
6	M	
7	Tu	
8	W	
9	Th	
10	Fr	
11	Sa	GRADUATION CEREMONIAL IN DIVINITY, LAW, ARTS, AND SCIENCE, AT 10 A.M. COMMEMORATION SERVICE IN ST GILES'S AT 12.
12	S	
13	M	*Meeting of University Court at* 4 P.M. *University Library, and Reading Room in New Buildings, open from* 10 A.M. *to* 1 P.M. *till* 20*th April. Closed on Saturdays. Senatus Office open from* 10 *to* 1 *till* 1*st May. Closed on Saturdays.*
14	Tu	

15	W	
16	Th	
17	Fr	
18	Sa	
19	S	
20	M	Edinburgh holiday.
21	Tu	*Meeting of University General Council at* 3 P.M.
22	W	*Names of Candidates for Final Exam. in Medicine to be given in, Certificates shown, and Fees paid.*
23	Th	
24	Fr	
25	Sa	
26	S	
27	M	
28	Tu	
29	W	
30	Th	*Last day for giving in Theses and paying Fees for M.D., and for D.Sc.*

1896—MAY, 31 DAYS.

1	Fr	
2	Sa	
3	S	
4	M	*Clinical Surgery Exams. begin.*
5	Tu	SUMMER SESSION OPENS. *Clinical Medicine Exams. begin.*
6	W	
7	Th	
8	Fr	
9	Sa	
10	S	
11	M	
12	Tu	LAW CLASSES OPEN. Court of Session sits.
13	W	
14	Th	
15	Fr	Whitsunday.
16	Sa	
17	S	
18	M	*Meeting of University Court at* 4 P.M. *Fellowships, Scholarships, Bursaries, paid by Factor.*
19	Tu	
20	W	
21	Th	HOLIDAY. General Assembly meets.
22	Fr	HOLIDAY IN FACULTY OF MEDICINE.
23	Sa	
24	S	Queen Victoria born, 1819.
25	M	
26	Tu	
27	W	
28	Th	
29	Fr	*Meeting of Senatus Academicus at* 3 P.M.
30	Sa	
31	S	

1896—JUNE, 30 DAYS.

1	M	
2	Tu	*University Local Examinations begin.*
3	W	
4	Th	
5	Fr	
6	Sa	
7	S	
8	M	
9	Tu	
10	W	
11	Th	
12	Fr	
13	Sa	
14	S	
15	M	*Meeting of University Court at* 4 P.M. *Final Prof. Written Exam. in Med. begins.* See Time-Table, page 657.
16	Tu	
17	W	*Final Prof. Oral Exams. begin.*
18	Th	
19	Fr	
20	Sa	*Accession of the Queen,* 1837.
21	S	
22	M	
23	Tu	
24	W	Midsummer Day.
25	Th	
26	Fr	*Meeting of Senatus Academicus at* 3 P.M.
27	Sa	
28	S	*Queen's Coronation,* 1838.
29	M	
30	Tu	

1896—JULY, 31 DAYS.

1	W	
2	Th	
3	Fr	
4	Sa	
5	S	
6	M	*Last day for Names of Candidates for Second Professional Examinations and for Third Professional (New Regulations) to be given in, Certificates shown, and Fees paid.* See Time-Tables, pages 639 and 657.
7	Tu	
8	W	
9	Th	*Last day for Names of Candidates for Examinations for Degrees in Arts and Science, and for First Professional Examination in Medicine to be given in, Certificates shown, and Fees paid.*
10	Fr	
11	Sa	
12	S	
13	M	*Meeting of University Court at* 4 P.M.
14	Tu	
15	W	*Second Professional Examinations in Medicine begin.* See Time-Tables, pages 639 and 657. *Last day for payment of Stamp Duty for M.D. Diplomas.*
16	Th	*Second Professional Oral Examinations begin. Third Professional Written Examination (New Regulations) begins.* See Time-Table, page 639.
17	Fr	SUMMER SESSION ENDS.
18	Sa	*Third Professional Oral Examinations begin. Practical Chemistry Examination for Degrees in Arts, Science, and Medicine begins.*
19	S	
20	M	*Examinations for Degrees in Arts (Dept. of Science), for Degrees in Science, and First Prof. in Medicine begin.* See Time-Tables, pages 150, 449, 638, and 656.
21	Tu	
22	W	*Oral Examinations for Degrees in Arts, Science, and Medicine begin.*
23	Th	
24	Fr	*Meeting of Senatus Academicus at* 3 P.M.: (1) *Candidates for Degrees to be reported and approved.*
25	Sa	
26	S	
27	M	
28	Tu	
29	W	
30	Th	
31	Fr	

1896—AUGUST, 31 DAYS.

1	Sa	GRADUATION CEREMONIAL IN LAW, MEDICINE, AND SCIENCE AT 10 A.M.
2	S	
3	M	*Library open from* 10 A.M *to* 1 P.M. *till Tuesday, 1st September. Closed on Saturdays. Reading Room, New Buildings, closed during same period. University Offices open from* 10 *to* 1 *till 1st Oct. Closed on Saturdays.*
4	Tu	
5	W	
6	Th	
7	Fr	
8	Sa	
9	S	
10	M	
11	Tu	
12	W	
13	Th	
14	Fr	
15	Sa	
16	S	
17	M	
18	Tu	
19	W	
20	Th	
21	Fr	
22	Sa	
23	S	
24	M	
25	Tu	
26	W	
27	Th	
28	Fr	
29	Sa	
30	S	
31	M	

1896—SEPTEMBER, 30 DAYS.

1	Tu	
2	W	*Reading Room in University New Buildings open from* 10 *to* 1 *till* 1st *October. Closed on Saturdays.*
3	Th	
4	Fr	
5	Sa	
6	S	
7	M	
8	Tu	
9	W	
10	Th	
11	Fr	
12	Sa	
13	S	
14	M	
15	Tu	
16	W	
17	Th	
18	Fr	*Last day for Names of Candidates for Preliminary Examinations to be given in, and Fees paid. Last day for entering for University Bursaries in the Faculties of Arts and Science, and for French and German for M.A., and for B.L. Preliminary on M.A. Standard.*
19	Sa	
20	S	
21	M	Edinburgh Holiday.
22	Tu	
23	W	
24	Th	
25	Fr	*Preliminary and Bursary Examinations may begin.* Time-Tables will be given in CALENDAR for 1896-7, and in the Regulations issued separately.
26	Sa	
27	S	
28	M	
29	Tu	
30	W	

Calendar for the Academic Year 1896-97.

OCTOBER 1896.						
S		4	11	18	25	
M		5	12	19	26	
Tu		6	13	20	27	
W		7	14	21	28	
Th	1	8	15	22	29	
Fr	2	9	16	23	30	
Sa	3	10	17	24	31	

NOVEMBER 1896.						
S	1	8	15	22	29	
M	2	9	16	23	30	
Tu	3	10	17	24		
W	4	11[1]	18	25		
Th	5	12	19	26		
Fr	6	13	20	27		
Sa	7	14	21	28		

DECEMBER 1896.						
S		6	13	20	27	
M		7	14	21	28	
Tu	1	8	15	22	29	
W	2	9	16	23	30	
Th	3	10	17	24	31	
Fr	4	11	18	25[2]		
Sa	5	12	19	26		

JANUARY 1897.						
S		3	10	17	24	31
M		4	11	18	25	
Tu		5	12	19	26	
W		6	13	20	27	
Th		7	14	21	28	
Fr	1	8	15	22	29	
Sa	2	9	16	23	30	

FEBRUARY 1897.						
S		7	14	21	28	
M	1	8[3]	15	22		
Tu	2	9	16	23		
W	3	10	17	24		
Th	4	11	18	25		
Fr	5	12	19	26		
Sa	6	13	20	27		

MARCH 1897.						
S		7	14	21	28	
M	1	8	15	22	29	
Tu	2	9	16	23	30	
W	3	10	17	24	31	
Th	4	11	18	25		
Fr	5	12	19	26		
Sa	6	13	20	27		

APRIL 1897.						
S		4	11	18	25	
M		5	12	19[5]	26	
Tu		6	13	20	27	
W		7	14	21	28	
Th	1	8	15	22	29	
Fr	2	9	16[4]	23	30	
Sa	3	10	17	24		

MAY 1897.						
S		2	9	16	23	30
M		3	10	17	24	31
Tu		4	11	18	25	
W		5	12	19	26	
Th		6	13	20	27	
Fr		7	14	21	28	
Sa	1	8	15[6]	22	29	

JUNE 1897.						
S		6	13	20	27	
M		7	14	21	28	
Tu	1	8	15	22	29	
W	2	9	16	23	30	
Th	3	10	17	24		
Fr	4	11	18	25		
Sa	5	12	19	26		

JULY 1897.						
S		4	11	18	25	
M		5	12	19	26	
Tu		6	13	20	27	
W		7	14	21	28	
Th	1	8	15	22	29	
Fr	2	9	16	23	30	
Sa	3	10	17	24	31	

AUGUST 1897.						
S	1	8	15	22	29	
M	2	9	16	23	30	
Tu	3	10	17	24	31	
W	4	11	18	25		
Th	5	12	19	26		
Fr	6	13	20	27		
Sa	7	14	21	28		

SEPTEMBER 1897.						
S		5	12	19	26	
M		6	13	20[5]	27	
Tu		7	14	21	28	
W	1	8	15	22	29	
Th	2	9	16	23	30	
Fr	3	10	17	24		
Sa	4	11	18	25		

[1] Martinmas Term. [2] Christmas. [3] Holiday in Faculty of Arts.
[4] Good Friday. [5] Edinburgh Holiday. [6] Whitsunday Term.

ADDRESSES OF THE PRINCIPAL, PROFESSORS, AND UNIVERSITY LECTURERS.

I.—Principal and Professors.

Principal Sir William Muir, Dean Park House.
Professor Annandale, 34 Charlotte Square.
„ Armstrong, The University.
„ Baldwin Brown, 20 Lansdowne Crescent.
„ Bayley Balfour, Inverleith House.
„ Crum Brown, 8 Belgrave Crescent.
„ Butcher, 27 Palmerston Place.
„ Calderwood, Craigrowan, 7 Napier Road, Merchiston.
„ Charteris, Cameron House, Dalkeith Road.
„ Chiene, 26 Charlotte Square.
„ Chrystal, 5 Belgrave Crescent.
„ Copeland, The Observatory, Blackford Hill.
„ Eggeling, 15 Hatton Place, Grange.
„ Ewart, Penicuik.
„ Flint, Johnstone Lodge, Craigmillar Park.
„ Fraser, 13 Drumsheugh Gardens.
„ Geikie, 31 Merchiston Avenue.
„ Sir Ludovic Grant, Bart., 29 India Street.
„ Greenfield, 7 Heriot Row.
„ Kennedy, 9 Fountainhall Road.
„ Kirkpatrick, 5 Murrayfield.
„ Laurie, Nairne Lodge, Duddingston.
„ Mackinnon, 9 Merchiston Place.
„ Mackintosh, 2 Drummond Place.
„ Sir Douglas Maclagan, 28 Heriot Row.
„ Masson, The University.
„ Nicholson, Eden Lodge, Newbattle Terrace.
„ Niecks, 22 Dick Place.
„ Prothero, 2 Eton Terrace.
„ Rankine, 23 Ainslie Place.
„ Rutherford, 14 Douglas Crescent.
„ Seth, 16 Church Hill.
„ Simpson, 52 Queen Street.

Professor Sir Thomas Grainger Stewart, 19 Charlotte Square.
„ Tait, 38 George Square.
„ Taylor, 6 Greenhill Park.
„ Sir Wm. Turner, 6 Eton Terrace.
„ Wallace, 5 Mansfield Place.
„ Wood, 16 Buckingham Terrace.

II.—Professors Emeriti.

George James Allman, LL.D., M.D., formerly Professor of Natural History; Ardmore, Parkstone, Dorset.

Alexander Campbell Fraser, D.C.L., LL.D., formerly Professor of Logic and Metaphysics; Gorton, Hawthornden, Midlothian.

Norman Macpherson, LL.D., formerly Professor of Scots Law; 6 Buckingham Terrace.

Sir Herbert Stanley Oakeley, D.C.L., LL.D., Mus. D., formerly Professor of Music; 16 Suffolk Street, London, S.W.

Charles Piazzi Smyth, LL.D., formerly Professor of Practical Astronomy; Clova, Ripon.

III.—Professors Resigned.

Theodor Aufrecht, M.A., Ph.D., formerly Professor of Sanskrit; The University, Bonn.

Sir Archibald Geikie, LL.D., formerly Professor of Geology; Museum of Geology, Jermyn Street, London.

Sir Joseph Lister, Bart., LL.D., M.D., formerly Professor of Clinical Surgery; 12 Park Crescent, Portland Place, London, W.

Æneas James George Mackay, LL.D., Sheriff of Fife, Advocate, formerly Professor of History; 7 Albyn Place, Edinburgh.

Right Hon. Lord Playfair, LL.D., formerly Professor of Chemistry; 68 Onslow Gardens, South Kensington, London.

Robert Wallace, D.D., M.P., formerly Professor of Church History; 50 Finborough Road, London, S.W.

IV.—University Lecturers.

Andrew P. Aitken, D.Sc., 57 Great King Street.

Colonel F. Bailey, R.E., 7 Drummond Place.

J. Beard, D.Sc., Ph.D., 93 Comely Bank Avenue.
G. W. Burnet, M.A., B.L., 46 Northumberland Street.
Edmond W. Carlier, M.D., 7 Gillespie Crescent.
James Carmichael, M.D., 22 Northumberland Street.
Thomas S. Clouston, M.D., Tipperlinn House, Morningside Place.
Leonard Dobbin, Ph.D., 7 Cobden Road.
Charles M. Douglas, M.A., D.Sc., 5 Greenhill Place.
John Smith Flett, M.A., B.Sc., M.B., C.M.
Professor Campbell Fraser, D.C.L., LL.D. (Gifford Lecturer on Natural Theology), Gorton, Hawthornden.
William Fream, LL.D., B.Sc., The Vinery, Downton, Salisbury.
Robert P. Hardie, M.A., 86 Braid Road.
David Hepburn, M.D., 5 Marchhall Crescent.
Francis Robert Jamieson, M.A., 9 Duncan Street.
Walter Hume Kerr, M.A., B.Sc., Viewfield, Juniper Green.
Cargill G. Knott, M.A., D.Sc., 42 Upper Gray Street.
Hugh Marshall, D.Sc., Druim Shellach, Liberton, Midlothian.
Adam Milroy, D.D. (Gunning Lecturer), Moneydie, Perth.
Robert Muir, M.D., 20 Hartington Place.
William Peddie, D.Sc., 2 Cameron Park.
John Playfair, M.D., 5 Melville Crescent.
Douglas Argyll Robertson, M.D., 18 Charlotte Square.
Charles Sarolea, Ph.D., D.Litt.
Otto Schlapp, 146 Morningside Road.
G. Gregory Smith, M.A., 9 Warrender Park Crescent.
William G. Smith, B.Sc., Ph.D., University Hall, Riddle's Court.
Joseph Tillie, M.D., 10 Castle Terrace.
Alexander Douglas Thomson, M.A., 86 Marchmont Road.
Charles Tweedie, M.A., B.Sc., 5 M'Laren Road.

University Officers.

—o—

Chancellor.

Date of Institution.		Appointed
1859.	RIGHT HON. ARTHUR JAMES BALFOUR, M.P., D.C.L., LL.D.	1891

Vice-Chancellor.

1859.	SIR WILLIAM MUIR, K.C.S.I., D.C.L., LL.D., Ph.D.	1885

Rector.

1859.	THE RIGHT HON. J. P. B. ROBERTSON, LL.D., Lord Justice-General	1893

Principal.

1582.	SIR WILLIAM MUIR, K.C.S.I., D.C.L., LL.D., Ph.D.	1885

Representative in Parliament.

1868.	RIGHT HON. SIR CHARLES JOHN PEARSON, Q.C., LL.D.	1890

—o—

University Court.

President—THE RECTOR.

THE PRINCIPAL	*Ex officio.*			
RT. HON. ANDREW M'DONALD, Lord Provost of Edinburgh	*Ex officio.*			
ÆNEAS J. G. MACKAY, LL.D., Advocate	Assessor, nominated by Chancellor			1891
THE HON. LORD STORMONTH DARLING, LL.D.	Do.	nominated by Rector	1887 &	1891
JAMES COLSTON	Do.	elected by Town Council		1886
PATRICK HERON WATSON, M.D., LL.D.	Do.	elected by General Council		1887
JOHN DUNCAN, M.D.	Do.	do.	do.	1889
J. HOPE FINLAY, W.S.	Do.	do.	do.	1893
A. TAYLOR INNES, M.A., Advocate.	Do.	do.	do.	1893
SIR WILLIAM TURNER, M.B., D.C.L., LL.D., Professor of Anatomy	Do.	elected by Senatus		1889
ALEXANDER CRUM BROWN, M.D., D.Sc., Professor of Chemistry	Do.	do.	do.	1889
SAMUEL HENRY BUTCHER, LL.D., Litt.D., Professor of Greek	Do.	do.	do.	1891
HENRY CALDERWOOD, LL.D., Professor of Moral Philosophy	Do.	do.	do.	1892

Secretary—PROFESSOR TAYLOR, D.D.
Factor and Law Agent—HENRY COOK, W.S.
Auditor—THOMAS GOLDIE DICKSON, C.A.

Clerk—THOMAS GILBERT.
Assistant Clerk—JAMES DOWIE.
Secretary's Clerk—GEORGE CAMPBELL.

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Curators of Patronage.

		Appointed.
PRINCIPAL SIR WILLIAM MUIR	Elected by University Court	1887
RIGHT HON. J. H. A. MACDONALD, C.B., LL.D., Lord Justice-Clerk.....	Elected by do. . . .	1890
PATRICK HERON WATSON, M.D., LL.D.	Elected by do.	1891
RT. HON. ANDREW M'DONALD, Lord Provost	Elected by Town Council	1895
SIR THOS. CLARK, Bart.	Elected by do.	1886
SIR JAS. ALEXANDER RUSSELL, LL.D.....	Elected by do.	1891
GEO. AULDJO JAMIESON, C.A.....	Elected by do.	1892

Secretary—R. HERBERT JOHNSTON, W.S., 66 Frederick Street.

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Senatus Academicus.

President—THE PRINCIPAL. **Secretary**—PROFESSOR KIRKPATRICK.

FACULTY OF ARTS.

Dean—GEORGE CHRYSTAL, LL.D., Professor of Mathematics.

Date of Institution.	Chairs.	Professors.	Appointed.	Patrons.
1760	**Rhetoric and English Literature**	DAVID MASSON, LL.D...	1865	Crown.
1583	**Humanity**.....		1895	Lds. of Ses., Cur., Fac. of Adv., and W.S. Soc.[1]
1583	**Greek**.....	SAMUEL HENRY BUTCHER, LL.D., Litt.D.	1882	Curators.
1642	**Hebrew and Semitic Languages**	ARCHIBALD ROBT. STIRLING KENNEDY, B.D., D.D.	1895	Curators.
1862	**Sanskrit and Comparative Philology**[2]	JULIUS EGGELING, Ph.D.	1875	Crown.
1882	**Celtic Languages, Literature, History, and Antiquities**[3]	DONALD MACKINNON, M.A.	1882	Curators.
1583	**Mathematics**.....	GEO. CHRYSTAL, LL.D...	1879	Curators.
1583	**Natural Philosophy**...	PETER GUTHRIE TAIT, M.A., D.Sc.	1860	Curators.
1583	**Logic & Metaphysics**.	ANDREW SETH, LL.D..	1891	Curators.
1583	**Moral Philosophy**.....	HENRY CALDERWOOD, LL.D.	1868	Curators.

[1] The Judges of the Court of Session nominate two Delegates, the Curators two, the Faculty of Advocates one, and the Society of Writers to the Signet one. These Delegates appoint the Professor, who receives his Commission from the Curators.

[2] This Chair was originally endowed by John Muir, LL.D. (Edin.), D.C.L. (Oxon.), late of the Bengal Civil Service, and by a Parliamentary vote.

[3] Originally endowed with a sum of £14,000, raised by public subscription.

Date of Institution.	Chairs.	Professors.	Appointed.	Patrons.
1719	**History**	JOHN KIRKPATRICK, LL.B., LL.D.	1881	Fac. of Adv., & Cur.
1893	**History**	GEORGE WALTER PROTHERO, M.A., D.Litt.	1894	UniversityCourt.
1871	**Commercial & Political Economy & Mercantile Law** [1]	JOSEPH SHIELD NICHOLSON, M.A., D.Sc.	1880	Cur., & Merch. Co.
1879	**Fine Art** [2] (Watson Gordon Chair)	GERARD BALDWIN BROWN, M.A.	1880	Univ. Ct., Pres. R. Scott. Acad.
1876	**Theory, History, and Practice of Education** [3]	SIMON SOMERVILLE LAURIE, LL.D.	1876	Bell Trustees.

FACULTY OF SCIENCE.

Dean—JAMES GEIKIE, D.C.L., LL.D., Professor of Geology.

1583	**Mathematics**	GEORGE CHRYSTAL, M.A., LL.D.	1879	Curators.
1583	**Natural Philosophy**	PETER GUTHRIE TAIT, M.A., D.Sc.	1860	Curators.
1786	**Astronomy**	RALPH COPELAND, Ph.D.	1889	Crown.
1713	**Chemistry**	ALEX. CRUM BROWN, M.D., D.Sc.	1869	Curators.
1767	**Natural History**	JAMES COSSAR EWART, M.D.	1882	Crown.
1676	**Botany**	ISAAC BAYLEY BALFOUR, M.D., D.Sc.	1888	Curators.
1705	**Anatomy**	Sir WILLIAM TURNER, M.B., D.C.L., LL.D.	1867	Curators.
1685	**Physiology**	WILLIAM RUTHERFORD, M.D.	1874	Curators.
1871	**Geology** [4]	JAMES GEIKIE, D.C.L., LL.D.	1882	Crown.
1868	**Engineering** [5]	GEO. FREDERICK ARMSTRONG, M.A., C.E.	1885	Crown.
1790	**Agriculture & Rural Economy** [6]	ROBERT WALLACE	1885	Lds.of Sess., Cur. & Univ. Ct.

FACULTY OF DIVINITY.

Dean—MALCOLM CAMPBELL TAYLOR, D.D., Professor of Ecclesiastical History.

1583	**Divinity**	ROBERT FLINT, D.D.	1876	Curators.
1846	**Biblical Criticism & Biblical Antiquities**	ARCHIBALD HAMILTON CHARTERIS, D.D.	1868	Crown.
1694	**Ecclesiastical History**	MALCOLM CAMPBELL TAYLOR, D.D	1877	Crown.
1642	**Hebrew and Semitic Languages**	ARCHD. ROBT. STIRLING KENNEDY, B.D., D.D.	1895	Curators.

[1] This Chair was endowed in 1871 by the Merchant Company of Edinburgh, and other Governors of George Watson's and Daniel Stewart's Hospitals.

[2] This Chair was endowed by Mr H. G. and Miss Frances Watson.

[3] This Chair was originally endowed by the Trustees of the late Dr A. Bell, with a sum of £6000, to which a further sum of £4500 out of the Bell Fund was added by the Educational Endowments Commission in 1887.

[4] This Chair was originally endowed in 1871 by a sum of £6000 mortified by Sir Roderick Impey Murchison, Bart., and by an annual vote by Parliament

[5] This Chair was endowed in 1868 by Sir David Baxter, and by an annual vote of Parliament.

[6] The Professor is elected by nine Delegates, three chosen by the Judges of the Court of Session, three by the Curators, and three by the University Court.

FACULTY OF LAW.

Dean—Sir Ludovic Grant, Bart., B.A., Professor of Public Law.

Date of Institution.	Chairs.	Professors.	Appointed.	Patrons.
1707	**Public Law**	Sir Ludovic Grant, Bart., B.A.	1890	Crown.
1710	**Civil Law**	James Mackintosh, B.A.	1893	Fac. of Adv., and Cur.[1]
1719	**History (Constitutional, etc.)**	John Kirkpatrick, LL.B., LL.D.	1881	Do.[1]
1722	**Scots Law**	John Rankine, M.A., LL.D.	1888	Do.[1]
1807	**Forensic Medicine**	Sir Douglas Maclagan, M.D., LL.D.	1862	Crown.
1825	**Conveyancing**[2]	John Philp Wood, W.S.	1891	Cur., Dep.-Kpr. and W.S. Soc.[3]
1871	**Commercial and Political Economy and Mercantile Law**	Joseph Shield Nicholson, M.A., D.Sc.	1880	Cur., & Merch. Co.

FACULTY OF MEDICINE.

Dean—Thomas Richard Fraser, M.D, LL.D., F.R.S., Professor of Materia Medica.

1713	**Chemistry**	Alex. Crum Brown, M.D.	1869	Curators.
1767	**Natural History**	James Cossar Ewart, M.D.	1882	Crown.
1676	**Botany**	Bayley Balfour, M.D.	1888	Curators.
1705	**Anatomy**	Sir Wm. Turner, M.B.	1867	Curators.
1685	**Physiology**	Wm. Rutherford, M.D.	1874	Curators.
1831	**Pathology**	William Smith Greenfield, M.D.	1881	Curators.
1768	**Materia Medica**	Thomas Richard Fraser, M.D.	1877	Curators.
1685	**Medicine**	Sir Thomas Grainger Stewart, M.D.	1876	Curators.
1831	**Surgery**	John Chiene, M.D.	1882	Curators.
1726	**Midwifery**	Alex. Russell Simpson, M.D.	1870	Curators.
1807	**Forensic Medicine**	Sir Douglas Maclagan, M.D.	1862	Crown.
1803	**Clinical Surgery**	Thos. Annandale, M.D.	1877	Crown.
1741	**Clinical Medicine**	Sir Thomas Grainger Stewart, M.D.	1876	
		Thomas Richard Fraser, M.D.	1877	
		William Smith Greenfield, M.D.	1881	
		Diseases of Women—Alexander Russell Simpson, M.D.	1870	

[1] For each of these Chairs the Faculty of Advocates send to the Curators a leet of two, of whom the Curators must choose one.

[2] Endowed by the Society of Writers to the Signet.

[3] The Election is by—(1) Two Delegates from the Curators; (2) Two from the Society of Writers to the Signet; and (3) The Deputy-Keeper of the Signet.

FACULTY OF MUSIC.

Dean—Professor NIECKS. The PRINCIPAL, *ex officio.*
Professor KIRKPATRICK, appointed by the Senatus.

Date of Institution.	Chair.	Professor.	Appointed.	Patrons.
1839	**Reid Chair of Music**	FREDERICK NIECKS.	1891	University Court.

UNIVERSITY LECTURERS.

	Subjects.	Lecturers.		
1892	**English**	G. GREGORY SMITH, M.A. Edin. and Oxon.	1892	University Court.
1892	**Latin**	FRANCIS ROBERT JAMIESON, M.A.	1892	Do.
1892	**Greek**	A. DOUGLAS THOMSON, M.A.	1892	Do.
1892	**Mathematics**	CHARLES TWEEDIE, M.A., B.Sc.	1892	Do
1892	**Natural Philosophy**	WILLIAM PEDDIE, D.Sc.	1892	Do.
1892	**Applied Mathematics**	CARGILL G. KNOTT, M.A., D.Sc.	1892	Do.
1892	**Logic & Metaphysics**	ROBERT P. HARDIE, M.A. Edin., B.A. Oxon.	1892	Do.
1892	**Moral Philosophy**	CHARLES DOUGLAS, M.A., D.Sc.	1892	Do
1894	**French Language and Literature and Romance Philology**	CHARLES SAROLEA, Ph.D., D.Litt.	1894	Do.
1894	**German Language and Literature and Teutonic Philology**	OTTO SCHLAPP.	1894	Do.
1894	**Chemical Theory**	LEONARD DOBBIN, Ph.D.	1894	Do.
1894	**Plant Physiology**	W.G. SMITH, B.Sc., Ph.D.	1894	Do.
1894	**Mineralogy and Crystallography**	HUGH MARSHALL, D.Sc.	1894	Do.
1894	**Petrology**	JOHN SMITH FLETT, M.A., B.Sc., M.B., C.M.	1894	Do.
1894	**Experimental Physiology and Histology**	EDMOND W. CARLIER, M.D., B.Sc.	1894	Do.
1895	**Geometrical and Mechanical Drawing**	WALTER HUME KERR, M.A., B.Sc.	1895	Do.
1894	**Agricultural Chemistry**	A. P. AITKEN, D.Sc.	1894	Do.
1889	**Forestry**	Colonel F. BAILEY, R.E.	1892	Do.
1890	**Agricultural Entomology**	WILLIAM FREAM, LL.D., B.Sc.	1891	Do
1887	**Gifford Lecturer on Natural Theology**	Emeritus Prof. CAMPBELL FRASER, D.C.L., LL.D.	1894	Do.
1889	**Gunning Lecturer**	ADAM MILROY, D.D.	1894	Do.
1894	**International Private Law**	G. W. BURNET, M.A., B.L.	1894	Do.
1884	**Procedure**		1895	Do.
1879	**Mental Diseases**	THOS. S. CLOUSTON, M.D,	1879	Do.
1883	**Diseases of the Eye**	DOUGLAS ARGYLL ROBERTSON, M.D.	1883	Do.
1885	**Clinical Instruction on Diseases of Children**	JAS. CARMICHAEL, M.D. JOHN PLAYFAIR, M.D.	1885 1889	Do. Do

Date of Institution.	Subjects.	Lecturers.	Appointed.	Patrons.
1885	Embryology and Vertebrate Zoology	John Beard, D.Sc.	1894	University Court.
1894	Regional Anatomy	David Hepburn, M.D.	1894	Do.
1894	Experimental Pharmacology	Joseph Tillie, M.D.	1894	Do.
1894	Pathological Bacteriology	Robert Muir, M.D.	1894	Do.

UNIVERSITY ASSISTANTS.

IN THE FACULTY OF ARTS.

Rhetoric and Eng. Liter	G. Gregory Smith, M.A., Edin. and Oxon.
Humanity	Francis R. Jamieson, M.A.
Greek	A. Douglas Thomson, M.A.
Hebrew and Semitic Languages	David Miller Kay, M.A., B.Sc., B.D.
Mathematics	Charles Tweedie, M.A., B.Sc.
Natural Philosophy	William Peddie, D.Sc.
Do. (Mechanical)	Thomas Lindsay.
Logic and Metaphysics	R. P. Hardie, M.A. Edin., B.A. Oxon.
Moral Philosophy	Charles Douglas, M.A., D.Sc.

IN THE FACULTY OF SCIENCE.

Geology	John S. Flett, M.A., B.Sc., M.B., C.M.
Engineering	W. H. Kerr, M.A., B.Sc.
Do., Demonstrator	W. G. Rennie, B.Sc.

IN THE FACULTY OF DIVINITY.

Divinity	Rev. William Hastie, B.D., D.D.
Hebrew and Semitic Languages	Rev. David M. Kay, M.A., B.Sc., B.D.

IN THE FACULTY OF LAW.

Civil Law	J. M. Irvine, M.A., B.Sc., LL.B.
Scots Law	James Ballantine.
Conveyancing	Robert Connon.

IN THE FACULTY OF MEDICINE.

Chemistry	Leonard Dobbin, Ph.D.; Hugh Marshall, D.Sc.; William White Taylor, M.A.; and A. Forbes Watson, B.Sc.
Zoology	J. Beard, D.Sc., Ph.D.; Gregg Wilson, M.A. B.Sc., Ph.D.
Botany	James Adam Terras, B.Sc., and J. H. Burrage, B.A. (Oxon.).
Anatomy	David Hepburn M.D.; J. B. Yeoman, M.B., C.M.
Physiology	E. W. Carlier, M.D., B.Sc.; Gustav Mann, M.D.; Robert Hutchison, M.B., C.M.
Pathology	Robt. Muir, M.A., M.D.; D. A. Welsh, M.B., B.Sc. *Laboratory Assistant*—Richard Muir.
Materia Medica	Joseph Tillie, M.D.; Wm. C. Sillar, M.B., C.M., B.Sc.
Medicine	Robert A. Fleming, M.A., M.B., C.M.
Clinical Medicine Tutors	Joseph Tillie, M.D.; Robert A. Fleming, M.A., M.B., C.M.; Harry Rainy, M.B., C.M.
Surgery	Harold J. Stiles, M.B., C.M.; E. G. Fortune, M.B., C.M.
Midwifery	J. Clarence Webster, B.A., M.D.
Forensic Medicine	Charles Hunter Stewart, M.B., C.M., D.Sc. J. Buchanan Young, M.B., C.M., D.Sc.
Clinical Surgery Tutor	A. Logan Turner, M.D.

Examiners.

PRELIMINARY EXAMINATION.

The Professors of or Lecturers on the several subjects, and the following additional Examiners:—

Subjects.	Examiners.	Appointed.	Patrons.
English	STEWART ALAN ROBERTSON, M.A.	1895	University Court.
Latin } **Greek**	JAMES CRUICKSHANK SMITH, M.A. Edin., B.A. Oxon.	1894	Do.
Mathematics	DAVID BEVERIDGE MAIR, M.A. Edin., B.A. Cantab.	1893	Do.
Modern Languages	CHARLES D. CAMPBELL...	1893	Do.
Dynamics	DAVID BEVERIDGE MAIR, M.A. Edin., B.A. Cantab.	1893	Do.

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Examiners for Degrees, &c.

I.—IN THE FACULTY OF ARTS.

The Professors of or Lecturers on the several Subjects, and the following additional Examiners:—

1. LANGUAGE AND LITERATURE.

Subjects.	Examiners.	Appointed.	Patrons.
Latin } **Greek**	JAMES CRUICKSHANK SMITH, M.A. Edin., B.A. Oxon.	1894	UniversityCourt
English	STEWART ALAN ROBERTSON, M.A.	1895	Do.
Modern Languages	CHARLES D. CAMPBELL.....	1893	Do.
Sanskrit	GEORGE B. GARDINER, M.A., D.Sc.	1893	Do.
Hebrew and Semitic Languages	ARTHUR POLLOK SYM, M.A., B.D.	1895	Do.
Classical Archæology	ALEX. S. MURRAY, M.A., LL.D.	1895	Do.

2. MENTAL PHILOSOPHY.

Logic and Metaphysics, Moral Philosophy	JAS. L. M'INTYRE, M.A., D.Sc.	1895	Do.
Political Economy	A. H. BRIGGS CONSTABLE, LL.B.	1893	Do.
Education	MAURICE PATERSON, B.A., LL.D.	1893	Do.
Philosophy of Law			Do.

3. SCIENCE.

Mathematics } **Natural Philosophy**	D. BEVERIDGE MAIR, M.A. Edin., B.A. Cantab.	1893	Do.
Astronomy	J. L. E. DREYER, Ph.D.....	1893	Do.
Chemistry	JOHN GIBSON, Ph.D.....	1893	Do.

Subjects.	Examiners.	Appointed	Patrons.
Zoology	ARTHUR E. SHIPLEY, M.A...	1895	University Court.
Botany	J. BRETLAND FARMER, M.A.	1893	Do.
Geology	HENRY MOWBRAY CADELL, B.Sc.	1893	Do.

4. HISTORY AND LAW.

History	JAMES MACKINNON, M.A., Ph.D.	1893	Do.
Archæology and Art (History of)	W. M. CONWAY	1893	Do.
Constitutional Law and History	J. ROBERTON CHRISTIE, LL.B.	1895	Do.
Roman Law			
Public Law			

II.—SCIENCE.

1. PURE SCIENCE.

The Professors of and Lecturers on the several subjects, and the additional Examiners in Mathematics, Natural Philosophy, Zoology, Botany, Chemistry, Astronomy, Anatomy, Physiology, and Geology.

2. ENGINEERING.

The Professors of and Lecturers on the several subjects, the additional Examiners in Mathematics, Natural Philosophy, and Chemistry, and in

		Appointed.	Patrons.
Engineering	DAVID A. STEVENSON, B.Sc., M.Inst. C.E.	1894	University Court.

3. PUBLIC HEALTH.

The Professors of and Lecturers on the several subjects, and the following additional Examiners :—

		Appointed.	Patrons.
Physics	WILLIAM HARVEY, B.A., LL.B.	1893	University Court.
Laboratory Work	JAMES ANGUS CAMERON, M.D., B.Sc.	1893	Do.
Medicine in its bearings on Public Health	JAMES O. AFFLECK, M.D.	1894	Do.
Sanitation, Sanitary Law, and Vital Statistics	F.W. BARRY, M.D., D.Sc.	1892	Do.

4. AGRICULTURE.

The Professors of and Lecturers on the several subjects, and the following additional Examiners :—

The additional Examiners in Mathematics, Chemistry, Botany, Natural History, Geology, and Political Economy, and in

		Appointed.	Patrons.
Agriculture	WM. SOMERVILLE, B.Sc., D.C.Econ.	1893	University Court.
Veterinary Hygiene	W. OWEN WILLIAMS, F.R.C.V.S.	1893	Do.
Chemistry as applied to Agriculture	JOHN HUNTER, F.L.S., F.I.C., F.R.P.S.	1893	Do.
Political Economy	A.H. BRIGGS CONSTABLE, LL.B.	1893	Do.

III.—IN THE FACULTY OF DIVINITY.

The Professors in the Faculty of Divinity, and the following additional Examiners :—

Subjects.	Examiners.	Appointed	Patrons.
George Gardiner, B.D.		1895	University Court.
Arthur P. Sym., B.D.		1895	Do.

IV.—IN THE FACULTY OF LAW.

The Professors of, and Lecturers on, the several subjects, and the following additional Examiners :—

		Appointed	Patrons.
Scots Law, Conveyancing, and Medical Jurisprudence	Robert L. Orr, LL.B.	1893	University Court
Roman, Public, and Constitutional Law	J. Roberton Christie, LL.B.	1895	Do.
Political Economy	A. H. Briggs Constable, LL.B.	1893	Do.

V.—IN THE FACULTY OF MEDICINE.

The Professors in the Faculty of Medicine, and the following additional Examiners:—

		Appointed.	Patrons.
Clinical Surgery	Joseph M. Cotterill, M.B., C.M.;	1894	University Court.
	Chas. W. Cathcart, M.B., C.M.	1895	Do.
Materia Medica	William Craig, M.D.	1892	Do.
Physiology	Prof. Wm. Stirling, M.D., D.Sc.	1892	Do.
Pathology	Alexander Bruce, M.D.	1892	Do.
Surgery	Geo. Thos. Beatson, M.D.	1892	Do.
Clinical Medicine	John Wyllie, M.D.	1892	Do.
Medical Jurisprudence	Fred. W. Barry, M.D., D.Sc.	1892	Do.
Physics	William Harvey, L.L.B.	1892	Do.
Medicine	Alexander James, M.D.	1893	Do.
Midwifery	A. H. F. Barbour, M.D.	1893	Do.
Anatomy	D. J. Cunningham, M.D.	1893	Do.
Chemistry	John Gibson, Ph.D.	1893	Do.
Botany	J. Bretland Farmer, M.A.	1893	Do.
Natural History	Arthur E. Shipley, M.A.	1895	Do.

VI.—IN THE FACULTY OF MUSIC.

The Professor of Music and Sir Alexander C. Mackenzie.

FOR SCHOOLMASTER'S DIPLOMA.

The Professor of Education and Maurice Paterson, B.A., LL.D. 1889.

FOR TITLE OF LITERATE IN ARTS.

The Professors of and Lecturers on the several subjects, and the Examiners for Degrees in Arts.

University Librarian.

HUGH ALEXANDER WEBSTER.

Assistants.

ALEXANDER ANDERSON. | CHARLES MARTIN.
JAMES H. S. GREGORY. | GEORGE TAIT.
DAVID CUTHBERTSON.

WILLIAM WRIGHT, *at University New Buildings.*

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Keepers of Museums.

Museum of Natural History	Professor EWART.
Anatomical Museum	Professor Sir WM. TURNER.
Do. Assistant Keeper.....	JAMES SIMPSON.

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Clerk of Senatus, and Sec. and Reg. of General Council	THOMAS GILBERT.
Assistant Clerks	JAMES OLIVER SINCLAIR, JAMES DOWIE, J. BANDON BROWN.
Clerk of Works	ALLAN E. L. CLARK.
Janitor	JOHN CHAPMAN.
Warders	ALEX. ADAIR, JAMES DONALDSON.

University of Edinburgh.

CONSTITUTION.

THE University of Edinburgh has grown into its present status out of what was originally a small College, called the "College of Edinburgh" or "The Town's College," which was founded in 1583 by the Town Council of Edinburgh, under the general powers to found educational institutions granted to them by the Charter of King James VI., dated 14th April 1582. No separate Charter of foundation is now extant; but from the first the College possessed the privilege of conferring degrees. This privilege was ratified by the "Act of Confirmation," an Act of Parliament passed in 1621, which secured to the "College of James VI." (as it had come to be called) all the rights, immunities, and privileges enjoyed by the Universities of Scotland. This ratification was renewed in the Treaty of Union between England and Scotland, and in the Act of Security. Gradually, in Acts of General Assembly, Acts of Town Council, and Acts of Parliament, the "College of James VI." came to be styled "The University of Edinburgh." But the institution remained under the absolute control and patronage of the Town Council of Edinburgh down to 1858, when, by the Universities (Scotland) Act, all the Universities of Scotland received new and autonomous constitutions.

The University of Edinburgh is a Corporation consisting of the Chancellor, Rector, Principal, Professors, Registered Graduates and Alumni, and Matriculated Students; and from 1858 to 1890 its government was vested in the Senatus Academicus, subject to the review and control of the University Court.

By the Universities (Scotland) Act, 1889, the University Court was constituted a body corporate with perpetual succes-

sion and a Common Seal; and the whole property, heritable and movable, belonging to the University, at the date of the passing of the Act, was transferred to and vested in the Court, with power to administer and manage the whole revenue and property of the University.

In addition to the various Endowments for Chairs, Fellowships, Scholarships, Bursaries, &c., the University possesses the property of the Old and New University Buildings, with the Libraries, Museums, Laboratories, Specimens, Apparatus, Furnishings, and Fittings; the Music Class-Room, containing a large organ, an interesting collection of Acoustic and Antique Musical Instruments, and a valuable Library of Music; and the official residence of the Principal.

The Senatus Academicus, as heretofore, regulates and superintends the teaching and discipline of the University, subject to the provisions of the Universities (Scotland) Acts of 1858 and 1889.

It may be interesting to show the numbers of Matriculated Students in the University, and the numbers of Degrees conferred by the University, immediately before the Acts of 1858 and of 1889 respectively came into operation.

The numbers of Matriculated Students were :—

	Arts.	Divinity.	Law.	Medicine.	Total.
In 1858-59	573	90	237	526	1336
In 1888-89	1022	109	471	1949	3551

The numbers of Degrees conferred were :—

	Arts.	Divinity.	Law.	Medicine.		Science.	
				M.B., C.M.	M.D.	B.Sc.	D.Sc.
In 1859	16	—	—	—	60	—	—
In 1889	116	11	23	210	60	34	2

The Degrees in Divinity, Law, and Science were instituted since 1859.

CHANCELLOR.

The Chancellor is elected by the General Council for life. He is the Head of the University. Changes in its ordinances and in its internal arrangements, proposed or approved by the Univer-

sity Court, must receive his sanction. All Degrees are conferred by him, or his deputy, the Vice-Chancellor. The Chancellor is President of the General Council, and nominates an Assessor in the University Court. The appointments have been as follows:—

Right Hon. Lord Brougham, 1859.
Right Hon. John Inglis, D.C.L., LL.D., 1868.
Right Hon. ARTHUR J. BALFOUR, M.P., D.C.L., LL.D., &c., 1891.

VICE-CHANCELLOR.

The Vice-Chancellor is nominated by the Chancellor. He may, in the absence of the Chancellor, confer Degrees, but cannot discharge any other of the Chancellor's duties. In the Vice-Chancellor's absence Degrees are conferred by the Principal, or, in his absence, by the senior member of Senatus present.

Upon the Vice-Chancellor is imposed the duty of acting as Returning Officer at Parliamentary Elections. If there be no Vice-Chancellor at the time of an Election, the University Court appoints one to act as Returning Officer. The appointments have been—

Sir D. Brewster, appointed 1860.
Sir Alexander Grant, Bart., 1868.
Sir WILLIAM MUIR, K.C.S.I., D.C.L., &c., 1885.

RECTOR.

The Rector is elected by the Matriculated Students on the second Saturday after the beginning of the Winter Session. The term of office is three years. The next election will take place in 1896. The Rector is President of the University Court, and nominates an Assessor in the University Court. He may, before he appoints his Assessor, confer with the Students' Representative Council. No Principal or Professor of any Scottish University is eligible for the office of Rector. The appointments have been—

Rt. Hon. W. E. Gladstone, 1859.
Thomas Carlyle, 1865.
Rt. Hon. Lord Moncreiff, 1868.
Sir W. Stirling Maxwell, Bt., 1871.
Rt. Hon. Earl of Derby, 1874.
Most Hon. Marquess of Hartington, M.P., 1877.
Rt. Hon. Earl of Rosebery, 1880.
Rt. Hon. Earl of Iddesleigh, 1883.
Most Hon. Marquess of Lothian, 1887.
Rt. Hon. George J. Goschen, M.P., LL.D., 1890.
Rt. Hon. J. P. B. ROBERTSON, LL.D., 1893.

REPRESENTATIVE IN PARLIAMENT.

In accordance with Clauses 27 to 41 of the "Representation of the People (Scotland) Act," 31 & 32 Vict., cap. 48, the Members of the General Councils of the Universities of Edinburgh and St Andrews elect a Member to serve in Parliament for these Universities.

When a poll is demanded, the votes are given by voting papers issued by the Registrar.

The appointments have been—

Sir Lyon Playfair, K.C.B., LL.D., 1868.

Rt. Hon. J. H. A. Macdonald, C.B., Q.C., LL.D., 1885, 1886.

M. T. Stormonth Darling, Q.C., 1888.

Rt. Hon. Sir CHARLES JOHN PEARSON, Q.C., LL.D., 1890, 1892.

The Parliamentary constituency for 1895 is as follows :—

Edinburgh	7712
St Andrews	1483
Total in 1895	9195

UNIVERSITY COURT.

The University Court has the following powers conferred by the "Universities Scotland Act, 1858," Sec. xii. :—

1. To review all decisions of the Senatus Academicus, and to be a Court of Appeal from the Senatus in every case, except as otherwise provided in the Universities Act :

2. To effect improvements in the internal arrangements of the University, after due communication with the Senatus Academicus, and with the sanction of the Chancellor ; provided that all such proposed improvements shall be submitted to the general Council for their consideration :

3. To require due attention on the part of the Professors to the Regulations as to the mode of teaching and other duties imposed on the Professors :

4. To fix and regulate, from time to time, the Fees in the several Classes :

5. Upon sufficient cause shewn, and after due investigation, to censure any member of the Senatus Academicus, or to suspend him from his office, and from the emoluments thereof, in whole or in part, for any period not exceeding one year, or to require him to retire from his office on a retiring allowance, or to deprive him of his office ; and during the Suspension of any Professor, to make due provision for the teaching of his class : Provided always that no such sentence of censure, suspension, or deprivation, or requisition on a Professor to retire from office, shall have any effect until it has been approved by Her Majesty in Council :

By Sec. xix. any of the Rules, Statutes, and Ordinances enacted by the Universities Commissioners for the purposes of the Act, may be altered or revoked by the University Court of the University to which the same are applicable, but only with the consent, expressed in writing, of the Chancellor thereof, and with the approval of Her Majesty in Council.

By the Universities (Scotland) Act, 1889, Section 5, Subsection (3), the University Court is a body corporate with perpetual succession and a common seal; and all the property belonging to the University, or to any existing college forming part of the University at the date of the passing of the Act, is thereby declared to be vested in the University Court.

By Section 6 of the last mentioned Act, the University Court, in addition to the powers conferred upon it by the Universities (Scotland) Act, 1858, subject to any ordinances made by the Commissioners, has power—

(1.) To administer and manage the whole revenue and property of the University, and the college or colleges thereof existing at the passing of this Act, including the share appropriated to such University out of the annual grant hereinafter mentioned, and also including funds mortified for bursaries and other purposes, and to appoint factors or collectors, to grant leases, to draw rents, and generally to have all the powers necessary for the management and administration of the said revenue and property:

(2.) To review any decision of the Senatus Academicus on a matter within its competency which may be appealed against by a member of the Senatus, or other member of the University having an interest in the decision, within such time as may be fixed by the Commissioners, and to take into consideration all representations and reports made to it by the Senatus Academicus and by the general council:

(3.) To review, on representation made by any of its members, or by any member of the Senatus Academicus, within such time as may be fixed by the Commissioners, any decision which the Senatus Academicus may come to in the exercise of its powers under section seven, sub-section one: Provided always, that the University Court shall not review any decision of the Senatus Academicus in a matter of discipline, except upon appeal taken either by a member of the Senatus or by a member of the University directly affected by such decision:

(4.) To appoint professors whose chairs are, or may come to be, in the patronage of the University; to appoint examiners and lecturers; and to grant recognition to the teaching of any college or individual teacher for the purposes of graduation, under any regulations on the subject laid down by the Commissioners, which regulations after the expiration of their powers may from time to time be modified or altered by the Universities Committee:

(5.) To define on application by any member of the Senatus Academicus the nature and limits of a professor's duties under his commission, subject to appeal to the Universities Committee:

(6.) To take proceedings against a principal or professor, University lecturer, assistant, recognised teacher or examiner, or any other person employed in teaching or examining under section twelve, sub-section five, of the Universities (Scotland) Act, 1858, without the necessity of any one not a member of the Court appearing as prosecutor, and for the purposes of such proceedings to call before it any member of the University to give evidence, and to require the production of documents, and also to institute and conduct any such inquiries as it may deem necessary:

(7.) To appoint from among members of the University or others, not being members of the Senatus Academicus, one third of the members of any standing committee or committees charged, by ordinance of the Commissioners under this Act, with the immediate superintendence of any libraries or museums, or the contents thereof, belonging to the University and college or colleges thereof existing at the passing of this Act, and on representation made by any of its members, or by any member of the Senatus Academicus, to review any decision which the Senatus Academicus, in the exercise of its powers, may come to in respect of the recommendations of such committee or committees:

(8.) To appoint committees of its own number consisting of not less than five members, with powers to report on any business that may be entrusted to them by the University Court, or to carry out special instructions ordered by the University Court:

(9.) To elect the representative of the University on the General Medical Council, under the Medical Act, 1886:

(10.) After the expiration of the powers of the Commission to found new professorships with the approval of the Universities Committee, and after such expiration no new professorship shall be founded except as herein [in the Act of 1889] provided.

After the expiration of the powers of the Commissioners, the University Court, by Section 21, shall have power to make such ordinances as they think fit, with the approval of Her Majesty in Council:

(1.) With respect to the appropriation of the sum allotted to such University by the Commissioners out of the annual grant hereinafter referred to:

(2.) Altering or revoking any of the ordinances affecting such University which have been or may be framed and passed under the Universities (Scotland) Act, 1858, or this Act, and making new ordinances:

Provided that such ordinances, before being submitted to Her Majesty for approval, shall have been communicated by the University Court to the Senatus Academicus and to the General Council, whose opinion thereon, if returned to the University Court within one month, shall have been taken into consideration; provided also that the said ordinances, when finally adjusted by the University Court, shall have been communicated to the University Courts of the other Universities, and that, if notice of dissent to such ordinances shall have been taken by any University Court, or by any person directly affected by such ordinance, to the University Court making such

ordinances within one month after the receipt thereof, the dissenting University Court or person may within one month after notifying dissent make a representation in regard thereto to Her Majesty in Council; provided further that no ordinance made under this section shall be of any validity until it has been approved by Her Majesty in Council, and that it shall be lawful for Her Majesty to refer such ordinances to the Universities Committee, who shall report to Her Majesty thereon: Provided further, that such ordinances shall be laid before both Houses of Parliament in the manner provided by section twenty of this Act: Provided further, that in computing the period of one month for the purposes of this section, the months of August and September shall not be counted, nor any part thereof.

Stated Meetings of the Court are held for the despatch of ordinary business on the Monday occurring during the seven days beginning on the 12th and ending on the 18th, both days inclusive, of each month, excepting the months of August and September, and on the first Monday after 19th January, if necessary, for hearing Registration Appeals. Other Ordinary Meetings may be called as the Court may direct. Special Meetings may at any time be called by order of the Rector or the Principal, or by the Secretary on a requisition specifying the object, signed by at least three members of the Court.

The University Court holds the patronage of the Chair of Music, and of the new Chair of History, and, in conjunction with the President of the Royal Scottish Academy, that of the Chair of Fine Art, as well as a share in the patronage of the Chair of Agriculture. It also elects three of the seven Curators of Patronage, and appoints the Lecturers and the Additional Examiners for Degrees.

The Court consists of the following members, viz.:—1. The Rector; 2. The Principal; 3. The Lord Provost of Edinburgh for the time being; 4. An Assessor nominated by the Chancellor; 5. An Assessor nominated by the Rector; 6. An Assessor nominated by the Lord Provost, Magistrates, and Town Council of Edinburgh; 7. Four Assessors elected by the General Council; 8. Four Assessors elected by the Senatus Academicus; 9. Such number, not exceeding four in all, of representatives of affiliated Colleges as may be appointed under and subject to the arrangements made in terms of section 15 (4), of the Act of 1889: Provided always, that the total number of repre-

sentatives of affiliated Colleges in the University Court of any University may be increased by the Commissioners or, after the expiration of their powers, by the Universities Committee, if in their opinion respectively special circumstances should arise to require such increase.

Seven members constitute a quorum. The Rector and his Assessor continue in office for three years; but in the event of the Chancellor or Rector ceasing to hold office, his Assessor continues to be a member of the University Court until an Assessor is nominated by the new Chancellor or Rector. The other Assessors continue in office for four years; but all Assessors are eligible for re-election, and no Principal or Professor of any Scottish University is eligible for election as Assessor to any other person or body than the Senatus Academicus. The Rector, and in his absence the Principal, presides at meetings of the University Court, and in the absence of both of them a chairman for the time is elected by the meeting. The person presiding at any meeting of the University Court has a deliberative vote, and also a casting vote in case of equality.

An abstract of the proceedings of the Court is given in a subsequent part of the Calendar.

The names of the present Assessors are given at page 1. The names of the Assessors previously to 1888 will be found in the Historical Appendix to List of University Graduates, published in 1889 (page 105). Former Assessors since 1888—*Elected by Chancellor*, T. Graham Murray, LL.D., 1887-1891. *Elected by Senatus Academicus*, A. Campbell Fraser, D.C.L., LL.D., 1877-1891, Malcolm Campbell Taylor, D.D., 1889-1892. *Elected by the Town Council*, John Clapperton, 1885-1895.

SCOTTISH UNIVERSITIES COMMITTEE OF PRIVY COUNCIL.

The Scottish Universities Committee of the Privy Council consists of the Lord President of the Privy Council, the Secretary for Scotland, the Lord Justice-General, if a member of the Privy Council, the Lord Justice-Clerk, if a member of the

Privy Council, the Lord Advocate, if a member of the Privy Council, the Chancellor of each of the Universities, if a member of the Privy Council, the Lord Rector of each of the Universities, if a member of the Privy Council, one member at least of the Judicial Committee of the Privy Council, and such other member or members of the Privy Council as Her Majesty may from time to time think fit to appoint.

The powers and duties of the Universities Committee may, subject to any rules or regulations which may from time to time be passed by Her Majesty in Council, be exercised and discharged by any three or more of the members of the Committee, one of whom shall be a member of the Judicial Committee of the Privy Council or one of Her Majesty's Senators of the College of Justice in Scotland.

CURATORS OF PATRONAGE.

By the Universities (Scotland) Act (1858), the patronage of the seventeen Chairs, previously in the gift of the Town Council, was transferred to seven Curators—three nominated by the University Court, and four by the Town Council. Besides these seventeen Chairs, the Curators have also a share in the patronage of those of Humanity, Agriculture, Civil Law, History, Scots Law, and Conveyancing, which was formerly possessed by the Town Council. They have also a share in the Patronage of the Chairs of Celtic Languages and Literature, and Commercial and Political Economy and Mercantile Law, which were instituted after the passing of the 1858 Act. The Curators hold office for three years. The names of the present Curators are given at page 2.

REPRESENTATIVE IN GENERAL MEDICAL COUNCIL.

In accordance with the Medical Act of 1858, the Universities of Edinburgh and Aberdeen were entitled jointly to elect a Member of the "General Council of Medical Education and

Registration of the United Kingdom." The appointments have been—

1858. James Syme.
1868. John Macrobin, M.D.
1873. William Turner, M.B.
1883. John Struthers, M.D.

Under the provisions of the Medical Act of 1886, Professor Sir William Turner was appointed in December 1886 for a period of five years, as representative of the University of Edinburgh.

1886. Sir William Turner, M.B., LL.D.

From 1858 to 1890 the Senatus exercised the right of election of the Representative of the University in the General Medical Council. By the Act of 1889, the Court is empowered to elect the Representative in future.

1891. Sir William Turner, M.B., D.C.L., LL.D.

PRINCIPAL.

The Principal, formerly elected by the Town Council, is now appointed by the Curators. The office is held for life. The Principal is the resident Head of the College, and President of the Senatus Academicus ; and, in the absence of the Rector, he presides at the meetings of the University Court, and in the absence of the Chancellor and Rector he presides at the Statutory Meetings of the General Council, and also at the Special Meetings, excepting those for the election of Assessors.

Principals Elected since 1586.

1586. Robert Rollock, *previously Regent*
1599. Henry Charteris
1620. Patrick Sands
1622. Robert Boyd
1623. John Adamson
1653. Robert Leighton
1662. William Colvill
1675. Andrew Cant
1685. Alexander Monro
1690. Gilbert Rule
1703. William Carstares
1716. William Wishart
1730. William Hamilton
1732. James Smith
1736. William Wishart, *secundus*
1754. John Gowdie
1762. William Robertson
1793. George Husband Baird
1840. John Lee
1859. Sir David Brewster
1868. Sir Alexander Grant, Bart.
1885. Sir Wm. Muir, K.C.S.I.

SENATUS ACADEMICUS.

The Principal and the Professors constitute the Senatus Academicus. This body is entrusted with the superintendence and regulation of the teaching and discipline of the University. The Senatus elects four Assessors in the University Court who hold office for four years. Two retire biennially, but may be re-elected; and in the event of a casual vacancy, the person elected to fill such vacancy shall go out of office at the date when the person whom he succeeded would in the ordinary rotation have retired. It appoints two-thirds of the members of any standing committee or committees charged by ordinance of the Commissioners with the immediate superintendence of any libraries or museums, or the contents thereof, belonging to the University and college or colleges thereof; and receives in the first instance all reports by such committee or committees, and subject to the review of the University Court, confirms, modifies, or rejects the recommendations in such reports. It also elects a representative in the General Assembly of the Church of Scotland; two Managers of the Royal Infirmary; two Governors of George Heriot's Trust; two Governors of Morrison's Academy, Crieff; two Governors of the Spence Bursary Trust; one Governor of Dollar Institution; one Governor of Stiell's Hospital, Tranent; two-thirds of the University Library Committee; and two-thirds of the University Museum Committee. Degrees in Arts, Science, Divinity, Law, Medicine, and Music are conferred, on the recommendation of the Senatus, by the Chancellor or Vice-Chancellor, and in the absence of both, by the Principal or senior Professor present. The Principal is President, with a deliberative and also a casting vote. In the absence of the Principal, the Senior Professor present acts as Chairman, also with a double vote. The Ordinary Meetings of Senatus are held on Saturday, 19th October, the last Saturday of November, January, February, and March; on the Saturday immediately preceding the Christmas holidays; on the last Friday of May, June, and July; on 1st August, not being a Sunday (for con-

ferring Degrees in Science, Law, Medicine, &c.); and in April (for Degrees in Arts, Science, Divinity, Law, &c.), on a day fixed at the Meeting in the January of the preceding year. Extraordinary Meetings may be called by the Principal or by three Professors. One-third of the Senatus constitutes a quorum.

The business of the Senatus is conducted by the Secretary, who, among other duties, summons the Meetings, prepares the Minutes, and intimates business assigned to the Principal, to the Deans of Faculties, or to the Conveners of Committees. The Secretary also administers the *Sponsio Academica* to Graduates.

FACULTIES.

The University contains six Faculties, as constituted in 1893 by Ordinance 31 of the Scottish Universities Commission of 1889, viz., Arts, Science, Divinity, Law, Medicine, and Music. Each Faculty is presided over by a Dean, who is elected from among the Professors of the Faculty, with the approval of the Senatus. Persons recommended for Degrees in each Faculty are presented to the Senatus by the Dean, to whom all communications regarding the administration of the Faculty should be addressed. Persons recommended for Degrees in Science in the departments of Mental Science and of Philology are presented by the Convener of the Committee for these Degrees. The Deans of the Faculties are mentioned at pp. 2, 3, 4, and 5. The Chairs in the various Faculties are here given in chronological order. The Faculties as previously constituted are given in the CALENDAR for 1893-94, and in previous CALENDARS.

FACULTY OF ARTS.

The Faculty of Arts embraces the Chairs of Humanity (Latin), Greek, Mathematics, Logic and Metaphysics, Moral Philosophy, Natural Philosophy, Hebrew and Semitic Languages, History (two Chairs), Rhetoric and English Literature, Sanskrit and Comparative Philology, Commercial and Political Economy and Mercantile Law, Education (Theory, History, and Practice of), Fine Art, Celtic (Languages, Literature, History, and Antiquities).

REGENTS AND PROFESSORS IN THE FACULTY OF ARTS SINCE 1583.

Regents of Philosophy from 1583 *to* 1708.

[*The Regents of Philosophy taught in rotation the four classes in the Curriculum of Arts, the "Bajans," the "Semi-Bajans," the "Bachelors," and the "Magistrands," as the Students of the first, second, third, and fourth year were respectively styled. Each Regent therefore taught every subject in the Curriculum—the Regent of Humanity being subordinate to the Regent of Philosophy, and being employed as a tutor in Classics for Unmatriculated Students. In* 1708 *the system was changed, and separate Professors for Latin, Greek, Logic and Metaphysics, Moral Philosophy and Natural Philosophy, were substituted for the Regents. A Professorship of Mathematics had previously existed.*]

1583. Robt. Rollock, *first Regent*
1583. Duncan Nairn
1585. Charles Lumisdaill
1586. Adam Colt
1586. Alexander Scrimgeour
1587. Philip Heslop
1588. Charles Ferme or Fairholm
1589. Henry Charteris
1589. Patrick Sands
1594. George Robertson
1597. William Craig
1597. John Adamson
1598. James Knox
1598. Robert Scott
1601. Andrew Young
1603. James Reid
1604. David Munro
1606. Blase Colt
1607. James Fairley
1608. William King
1611. Andrew Stevenson
1625. Samuel Rutherford
1625. Robert Ranken
1626. Thomas Crawford
1626. John Brown
1631. Alexander Hepburn
1636. James Wyseman
1638. James Wright
1638. Robert Young
1639. Duncan Forrester
1644. William Tweedie
1644. James Pillans
1647. Andrew Suttie
1653. John Wishart
1665. George Sinclair
1666. John Wood
1667. William Paterson
1679. Gilbert M'Murdoch
1679. Andrew Massie
1680. Alexander Cockburn
1682. Robert Lidderdail
1684. Herbert Kennedy
1686. Thomas Burnet
1689. Alexander Cunningham
1690. William Law
1695. John Row
1695. William Scott
1701. Charles Areskine
1703. Robert Stewart
1707. Colin Drummond

Regents of Humanity from 1597 *to* 1708.

1597. John Ray
1606. Blase Colt
1611. Oliver Colt
1611. Robert Burnet
—— Andrew Stevenson
1623. Samuel Rutherford
1626. Thomas Craufurd
1630. John Armour
1633. Alexander Gibson
1636. James Wyseman
1638. Robert Young
1644. James Pillans
1653. John Wishart
1656. William Forbes
1656. James M'Gowan
1658. Hugh Smith
1663. William Cumming
1665. Andrew Ross

1665. Thomas Bell
1676. Gilbert MacMurdo
1679. Alexander Cunningham
1689. John Drummond

Professsors of Mathematics since 1620.

1620. Andrew Young
1640. Thomas Craufurd
1674. James Gregory
1683. David Gregory
1692. James Gregory
1725. Colin M'Laurin
1747. Matthew Stewart
1775. Dugald Stewart
1785. Adam Ferguson
1785. John Playfair
1805. John Leslie
1819. William Wallace
1838. Philip Kelland
1879. GEORGE CHRYSTAL

Professors of Humanity since 1708.

1708. Laurence Dundas
1728. Adam Watt
1734. John Kerr
1741. George Stuart
1775. John Hill
1806. Alexander Christison
1820. James Pillans
1863. William Young Sellar
1891. H. Chester Goodhart
1895.

Professors of Greek since 1708.

1708. William Scott, *one of the Regents*
1729. William Scott, *secundus*
1730. Colin Drummond
1738. Robert Law
1741. Robert Hunter
1772. Andrew Dalziel
1805. George Dunbar
1852. John Stuart Blackie
1882. SAMUEL HENRY BUTCHER

Professors of Logic and Metaphysics since 1708.

1708. Colin Drummond, *one of the Regents*
1730. John Stevenson
1774. John Bruce
1786. James Finlayson
1808. David Ritchie
1836. Sir Wm. Hamilton, Bart.
1856. Alexander Campbell Fraser
1891. ANDREW SETH

Professors of Moral Philosophy since 1708.

1708. William Law, *one of the Regents*
1729. William Scott
1734. John Pringle
1745. William Cleghorn
1754. James Balfour
1764. Adam Ferguson
1785. Dugald Stewart
1810. Thomas Brown
1820. John Wilson
1853. P. C. M'Dougall
1868. HENRY CALDERWOOD

Professors of Natural Philosophy since 1708.

1708. Robert Stewart, *one of the Regents*
1742. John Stewart
1759. Adam Ferguson
1764. James Russell
1774. John Robison
1805. John Playfair
1819. Sir John Leslie
1833. James David Forbes
1860. PETER GUTHRIE TAIT

Professors of Hebrew and Semitic Languages since 1642.

(See Faculty of Divinity.)

Professors of History since 1719.

1719. Charles Mackie.
1753. John Gordon.
1754. William Wallace.
1755. John Pringle.
1780. Alexander Fraser Tytler.
1801. William Fraser Tytler.
1821. Sir William Hamilton.
1837. George Skene.
1842. George Frederick Ferrier.
1846. Cosmo Innes.
1874. Æneas Jas. Geo. Mackay.
1881. JOHN KIRKPATRICK.
1894. GEORGE W. PROTHERO.

Professors of Rhetoric and English Literature since 1762.

1762. Hugh Blair
1784. William Greenfield
1801. Andrew Brown
1835. George Moir
1840. William Spalding
1845. William Edmondstoune Aytoun
1865. DAVID MASSON

Professors of Sanskrit since 1862.

1862. Theodor Aufrecht
1875. JULIUS EGGELING

Professors of Commercial and Polit. Economy and Mercantile Law since 1871.

(See also Faculty of Law.)

1871. W. B. Hodgson
1880. JOSEPH SHIELD NICHOLSON

Professor of Education.

1876. SIMON SOMERVILLE LAURIE

Professor of Fine Art.

1880. GERARD BALDWIN BROWN

Professor of Celtic Languages, &c.

1882. DONALD MACKINNON

FACULTY OF SCIENCE.

[As Constituted in 1893 by Ordinance No. 12 (General No. 7) of the Scottish Universities Commission.]

The Faculty of Science embraces the Chairs of Mathematics, Natural Philosophy, Botany, Anatomy, Chemistry, Physiology, Natural History, Astronomy, Agriculture and Rural Economy, Engineering, and Geology.

PROFESSORS IN THE FACULTY OF SCIENCE SINCE ITS INSTITUTION IN 1893.

Professors of Mathematics.
(See Faculty of Arts.)

Professors of Natural Philosophy.
(See Faculty of Arts.)

Professors of Botany.
(See Faculty of Medicine.)

Professors of Anatomy.
(See Faculty of Medicine.)

Professors of Chemistry.
(See Faculty of Medicine.)

Professors of Physiology.
(See Faculty of Medicine.)

Professors of Natural History.
(See Faculty of Medicine.)

Professors of Practical Astronomy since 1786.

1786. Robert Blair
1834. Thomas Henderson
1846. Charles Piazzi Smyth
1889. Ralph Copeland

Professors of Agriculture and Rural Economy since 1790.

1790. Andrew Coventry
1831. David Low
1854. John Wilson
1885. Robert Wallace

Professors of Engineering.

1868. Fleeming Jenkin
1885. George Frederick Armstrong

Professors of Geology.

1871. Archibald Geikie
1882. James Geikie

Professor of Technology.

1855. George Wilson
[Chair abolished in 1859.]

FACULTY OF DIVINITY.

This Faculty, the second in chronological order, comprehends the four Chairs of Divinity, Hebrew and Semitic Languages, Ecclesiastical History, and Biblical Criticism and Antiquities.

Professors in the Faculty of Divinity since 1620.

Professors of Divinity since 1620.

1620. Andrew Ramsay
1627. Henry Charteris
1629. James Fairly
1630. John Sharpe
1648. Alexander Colvill
1649. Samuel Rutherford
1650. David Dickson
1662. Patrick Scougall
1664. William Keith
1675. Laurence Charteris
1682. John Menzies
1683. John Strachan
1690. George Campbell
1701. George Meldrum
1709. William Hamilton
1732. James Smith
1733. John Gowdie
1754. Robert Hamilton
1779. Andrew Hunter
1809. William Ritchie
1828. Thomas Chalmers
1844. John Lee
1859. Thomas J. Crawford
1876. Robert Flint

Professors of Hebrew and Semitic Languages since 1642.

1642. Julius Conradus Otto
1656. Alexander Dickson
1679. Alexander Amedeus
1681. Alexander Douglas
1692. Patrick Sinclair
1694. Alexander Rule
1702. John Goodall
1719. James Crawford
1732. William Dawson
1751. James Robertson
1792. George Husband Baird
1793. William Moodie
1812. Alexander Murray
1813. Alexander Brunton
1848. David Liston
1880. David Laird Adams
1892. John Dobie
1895. Archibald Robert Stirling Kennedy

Professors of Ecclesiastical History since 1695.

1702. John Cumming
1715. William Dunlop
1726. Matthew Crawford
1737. Patrick Cumming
1762. Robert Cumming
1788. Thomas Hardie
1799. Hugh Meiklejohn
1831. David Welsh
1844. James Robertson
1861. William Stevenson
1872. Robert Wallace
1876. Malcolm Campbell Taylor.

Professors of Biblical Criticism and Biblical Antiquities since 1846.

1847. Robert Lee
1868. Archibald Hamilton Charteris

FACULTY OF LAW.

To this Faculty belong seven Chairs, viz.:—Public Law, Civil or Roman Law, History (Constitutional, &c.), Scots Law, Forensic Medicine, Conveyancing, and Commercial and Political Economy and Mercantile Law. Attendance on these classes is required by Candidates for Degrees in Law.

Professors in the Faculty of Law since 1707.

Professors of Public Law since 1707.

1707. Charles Areskine
1734. William Kirkpatrick
1735. George Abercrombie
1759. Robert Bruce
1764. James Balfour
1779. Allan Maconochie
1796. Robert Hamilton
1832. * * *
1862. James Lorimer
1890. Sir Ludovic Grant, Bt.

Professors of Civil Law since 1710.

1710. James Craig
1732. Thomas Dundas
1745. Kenneth M'Kenzie
1755. Robert Dick
1792. John Wilde
1800. Alexander Irving
1827. Douglas Cheape
1842. A. Campbell Swinton
1862. James Muirhead
1889. Henry Goudy
1893. James Mackintosh

Professors of History (Constitutional, &c.) since 1719.

1719. Charles Mackie
1753. John Gordon
1754. William Wallace
1755. John Pringle
1780. Alex. Fraser Tytler
1801. William Fraser Tytler
1821. Sir William Hamilton
1837. George Skene
1842. James Frederick Ferrier
1846. Cosmo Innes
1874. Æneas Jas. Geo. Mackay
1881. John Kirkpatrick

Professors of Scots Law since 1722.

1722. Alexander Bayne
1737. John Erskine
1765. William Wallace
1786. David Hume
1822. George Joseph Bell
1843. John Schank More

1861. George Ross
1864. George Moir
1865. Norman Macpherson
1888. John Rankine

Professors of Forensic Medicine since 1807.

1807. Andrew Duncan, *secundus*
1820. William Pulteney Alison
1822. Robert Christison
1832. Thomas Stewart Traill
1862. Sir Douglas Maclagan

Professors of Conveyancing since 1825.

1825. Macvey Napier
1847. Allan Menzies
1856. A. Montgomerie Bell
1866. James Stuart Fraser Tytler
1892. John Philp Wood

Professors of Commercial and Political Economy since 1871.[1]

1871. W. B. Hodgson, and reappointed 1878
1880. Joseph Shield Nicholson

FACULTY OF MEDICINE.

The Faculty consists of the following twelve Chairs:—Botany, Physiology, Medicine, Anatomy, Chemistry, Midwifery, Natural History, Materia Medica, Surgery, Clinical Surgery, Forensic Medicine, and Pathology. The Professors of Medicine, Materia Medica, and Pathology, are also Professors of Clinical Medicine. Some of these Chairs were instituted in the seventeenth century, but it does not appear that the Medical School and Faculty of the University were established earlier than the beginning of last century.

Professors in the Faculty of Medicine since 1676.

Professors of Botany since 1676.

1676. James Sutherland
1706. Charles Preston
1712. George Preston

Professors of Medicine and Botany.

1738. Charles Alston
1761. John Hope
1786. Daniel Rutherford
1820. Robert Graham
1845. John Hutton Balfour

Professors of Botany.

1879. Alexander Dickson
1888. Isaac Bayley Balfour

Professors of Medicine in 1685.

1685. Sir Robert Sibbald, James Halket, Archibald Pitcairne

Professors of Institutes of Medicine or Physiology since 1724.

1724. William Porterfield
1726. Andrew St Clair, John Rutherford
1747. Robert Whytt
1766. William Cullen
1773. Alex. Monro Drummond
1776. James Gregory

[1] This Chair was declared to be a Professorship in the Law as well as in the Arts Faculty by resolution of the Senatus Academicus in 1879.

1789. Andrew Duncan
1819. Andrew Duncan, *secundus*
1821. William Pulteney Alison
1842. Allen Thomson
1848. John Hughes Bennett
1874. William Rutherford

Professors of Medicine since 1724.

1724. William Porterfield
1726. { Andrew St Clair / John Rutherford
1747. Robert Whytt
1766. John Gregory
1773. William Cullen
1790. James Gregory
1821. James Home
1842. William Pulteney Alison
1855. Thomas Laycock
1876. Sir Thomas Grainger Stewart

Professors of Anatomy since 1705.

1705. Robert Elliot
1708. Adam Drummond
1716. John M'Gill
1720. Alexander Monro
1754. Alex. Monro, *secundus*
1798. Alexander Monro, *tertius*
1846. John Goodsir
1867. Sir William Turner

Professors of Chemistry and Medicine since 1713.

1713. James Crawford
1726. Andrew Plummer
1726. John Innes
1755. William Cullen
1766. Joseph Black
1795. Thomas Charles Hope

Professors of Chemistry.

1844. William Gregory
1858. Lyon Playfair
1869. Alex. Crum Brown

Professors of Midwifery since 1726.

1726. Joseph Gibson
1739. Robert Smith
1756. Thomas Young
1780. Alexander Hamilton
1800. James Hamilton
1840. Sir J. Y. Simpson, Bart.
1870. Alexander Russell Simpson

Professors of Natural History since 1767.

1770. Robert Ramsay
1779. John Walker
1804. Robert Jameson
1854. Edward Forbes
1855. George James Allman
1870. Sir Wyv. T. C. Thomson
1882. James Cossar Ewart

Professors of Materia Medica since 1768.

1768. Francis Home
1798. James Home
1821. Andrew Duncan, *secundus*
1832. Sir Robt. Christison, Bart.
1877. Thomas Richard Fraser

Professors of Surgery since 1777.

1777. Alex. Monro, *secundus*
1798. Alexander Monro, *tertius*
1831. John William Turner
1836. Sir Charles Bell
1842. James Miller
1864. James Spence
1882. John Chiene

Professors of Clinical Surgery since 1803.

1803. James Russell
1833. James Syme
1869. Joseph Lister
1877. Thomas Annandale

Professors of Forensic Medicine since 1807.

(See Faculty of Law.)

Professors of Pathology since 1831.

1831. John Thomson
1842. William Henderson
1869. W. R. Sanders
1881. William Smith Greenfield

Professors of Military Surgery since 1806.

1806. John Thomson
1823. Sir George Ballingall
[Chair abolished.]

FACULTY OF MUSIC.

Reid Professors of Music since 1839.

1839. John Thomson.
1841. Sir Henry Rowley Bishop
1844. Henry Hugh Pearson
1845. John Donaldson
1865. Sir Herbert Stanley Oakeley
1891. Frederick Niecks.

Principal Sir William Muir is a member of this Faculty *ex officio*, and Professor Kirkpatrick was appointed a member by the Senatus.

GENERAL COUNCIL OF THE UNIVERSITY.

The Chancellor, the Members of the University Court, the Professors, the Graduates, and all persons who previous to 2nd August 1861 had, as Matriculated Students, given regular attendance on the course of study in the University for four complete Sessions, or for three complete Sessions in this, and a fourth in another Scottish University—the attendance for at least two of such sessions having been on the course of study in the Faculty of Arts, are entitled to be registered as Members of the General Council. The fee for registration is £1.

The Register for the current year contains 7712 Members, and is conclusive of the rights of persons to be Members up to 1st January 1896. By the Universities Elections Amendment (Scotland) Act all candidates for graduation are required to pay the Registration Fee before they can be allowed to appear for graduation.

Under the Universities (Scotland) Act of 1858, and the Commissioners' Ordinance No. 1, section 3, following thereon, the Council meets twice a-year—viz., on the *first Tuesday after the fourteenth day of April*, and on the *last Friday in*

October, at three o'clock P.M., "*to take into their consideration* all questions affecting the well-being and prosperity of the University, and to *make representations from time to time on such questions* to the *University Court*, who shall consider the same, and return to the Council their deliverance thereon." All proposed improvements in the internal arrangements of the University "shall be submitted to the University Council for their consideration."

By the Universities (Scotland) Act, 1889, in addition to the two statutory meetings above mentioned, the Council "may hold special meetings at the instance of the Chancellor, who shall convene such meetings on a requisition from a quorum of members, and the Council may adjourn any meeting, and may appoint Committees to investigate into and report upon any matter remitted to them or to carry out instructions given to them by the Council." The Universities Commissioners under the last-mentioned Act have fixed the quorum of the General Council at ten for every complete thousand or fraction of a thousand on the register of the members, but this provision does not apply to the statutory half-yearly meetings, or to adjourned meetings.

At the meetings of the General Council, in the absence of the Chancellor, Rector, and Principal, the Chancellor's Assessor, and in his absence the Rector's Assessor shall preside; and in the absence of all of the said officials, a Chairman shall be elected by the meeting, provided that no member of the Senatus shall preside at any meeting of the Council held for the purpose of electing an Assessor or Assessors. The Chairman decides all points of order, and has a deliberative and a casting vote, and in case of an equality of votes at the conclusion of a poll, the Chairman, or any one appointed by the University Court to act for him, shall have a casting vote.

The General Council of this University, and the General Council of the University of St Andrews jointly, return a Member of Parliament.

The *Chancellor* and *four of the Assessors* in the University Court are elected by the Council. The Chancellor holds office

for life, and the Assessors for four years from the date of Election. Two of the Assessors retire biennially, but may be re-elected. In the event of a casual vacancy the person elected to fill such vacancy retires from office at the date when the person whom he succeeded would in the ordinary rotation have retired. No member of the Senatus Academicus of any University is entitled to vote or take part in the election of any Assessor of the General Council of that University. The next election of two Assessors will take place at the statutory half-yearly meeting in *October* 1895.

Members of General Council are entitled to the use of the University Library on payment of an annual fee of 10s. 6d., or they may compound for such annual fee by one payment of £5, 5s.

Three Standing Committees have been appointed by the General Council—viz., a Business Committee, an Ordinances Committee, and a Finance Committee. The Conveners are:

Business Committee—J. Campbell Lorimer, Esq., LL.B.
Ordinances Committee—W. Scott Dalgleish, Esq., LL.D.
Finance Committee—David D. Buchan, Esq., LL.B.

STUDENTS' REPRESENTATIVE COUNCIL.

Presidents—S. J. Aarons; W. J. Garbutt; D. Waterston, M.A. *Secretaries and Treasurers*—A. Corsar Sturrock, M.A., 3 Upper Gilmore Place; Arthur W. Limont, The Union.

The Students' Representative Council was founded in 1884. Its aims are—(1) To represent the Students in matters affecting their interests; (2) To afford a recognized means of communication between the Students and the University authorities; and (3) To promote social life and academic unity among the Students. The Council is elected annually in November, partly by the Students of the different Faculties, and partly by the recognised Students' societies. Meetings are held in November, December, January, February, March, May, June, July, and October. At the November meeting an executive committee is elected, consisting of three presidents, two secretaries and treasurers, and ten other members, representing the four Faculties.

The Commissioners, under powers contained in the Universities (Scotland) Act, 1889, have issued an Ordinance providing as follows :—

1. The Students' Representative Council shall submit to the University Court for approval the regulations under which it exists, and these regulations as approved, or with such alterations as may from time to time be approved by the University Court, shall form the constitution of the Students' Representative Council, and shall, subject to the provisions of this Ordinance, determine the functions thereof, and the mode of election thereto.

2. After the University Court has approved of the constitution of a Students' Representative Council, alterations in the said constitution shall be of no effect unless and until they shall receive the approval of the University Court.

3. (1) The Students' Representative Council shall be entitled to petition the Senatus Academicus with regard to any matter affecting the teaching and discipline of the University, and the Senatus Academicus shall dispose of the matter of the petition, or shall, if so prayed, forward any such petition to the University Court, with such observations as it may think fit to make thereon.

(2) The Students' Representative Council shall be entitled to petition the University Court with regard to any matter affecting the Students other than those falling under the immediately preceding sub-section.

(3) Nothing contained in this Section shall be held to prejudice any right of appeal which may be competent under Section 6, sub-section 2, of the said Act, nor the powers and jurisdiction of the Senatus Academicus with regard to the teaching and discipline of the University.

MATRICULATION.

University Matriculation consists in the signing of the Sponsio Academica by Students, thus entering their names in the General Roll of Students of the University, and in paying a fee of £1, 1s. for the academic year 1st October to 1st October,

or a fee of 10s. 6d. for a Summer Session (1st May to 1st October). Matriculation is necessary before a Student can enter any of the Classes in the University, excepting certain additional courses after mentioned.

Matriculated Students may be members of any of the six Faculties. They have the privilege of electing the Rector of the University. In case of an equality of votes, the Chancellor, or failing him, the Principal, has the casting vote. Students also enjoy the right of admission to the University Library, and on certain days to the Museum of Natural History. Their names are preserved in the General Album, which is the legal register of attendance at the University.

All Candidates for Graduation availing themselves of permission to attend the Lectures of Extra-Academical Teachers in Edinburgh, and who are not attending Classes within the University, must, at the beginning of each year of such attendance, enrol their names in a book to be kept by the University for that purpose, and pay a Fee of the same amount as the Matriculation Fee paid by Students of the University. In respect of such payment they have a right to the use of the Library of the University.

The following is the Sponsio Academica signed by students on matriculating :—

QUOD FAUSTUM FELIXQUE SIT. A. D.——

Ego Universitatis Academicae Edinburgensis Discipulus sinceré ac sancté promitto quod et syngraphâ hac meâ in perpetuum testatum cupio, mihi ante omnia cordi ac curae futurum verae pietatis studium ; me etiam in assuetis academici curriculi studiis sedulum fore, ut adolescentem bene institutum decet ; et quamdiu in illo curriculo permansero praeceptoribus omnibus morigerum memet praestiturum, nec ullius dissidii aut tumultus clam palamve vel auctorem vel participem futurum, et per reliquam vitam Universitatem Academicam Edinburgensem ipsam grato et benevolo animo prosecuturum, idque omnibus officiis pro facultate mea et occasione data testaturum esse.

MATRICULATIONS (1st May 1894 to 1st May 1895).

FOR SUMMER SESSION 1894 :—

I. Faculty of Arts	24	
II. Faculty of Science	7	
III. Faculty of Law	7	
IV. Faculty of Medicine	25	
		63

FOR ACADEMIC YEAR :—

I. Faculty of Arts	738	
II. Faculty of Science	146	
III. Faculty of Divinity	68	
IV. Faculty of Law	444	
V. Faculty of Medicine	1,454	
VI. Faculty of Music	11	
		2,861
Total Matriculations (1st May 1894 to 1st May 1895)		2,924

NON-MATRICULATED EXTRA-ACADEMICAL STUDENTS ATTENDING CLASSES IN EDINBURGH.

(1st May 1894 to 1st May 1895.)

I. Faculty of Medicine	15
Total Non-Matriculated Extra-Academical Students (1st May to 1st May)	15

The University Court in special circumstances has power to permit persons who have not Matriculated to attend any single Class in any Faculty, on payment of an Entrance Fee to be fixed by the University Court in addition to the authorised Class Fee ; subject to the following provisions, viz. : (1) that attendance on any Class without payment of the Matriculation Fee shall not qualify for Graduation in any Faculty ; (2) that persons who have not paid the Matriculation Fee shall not be entitled to a Certificate of Attendance on any Class ; and (3) that payment of such Entrance Fee shall not confer any University privilege other than the right of attendance on such Class. The University Court has fixed the Entrance Fee at Five Shillings.

The Courses which at present may be attended under this Regulation (if not required for Graduation) are :—

Constitutional History, additional Courses on.
Fine Art, short additional Courses on.
Economic History, short Courses on (in connection with Political Economy).
Civil and Criminal Procedure.
Do. Practical Class.
Mental Diseases.
Diseases of the Eye.
Clinical Instruction on Diseases of Children.
Comparative Embryology.
Forestry.
Agricultural Entomology.
Music Classes.
Practical Pathological Bacteriology.
Chemical Laboratory
Experimental Pharmacology.

Number of Non-Matriculated Students who have paid the Entrance Fee, 1st May 1894 to 1st May 1895—72.

Other Courses may from time to time be sanctioned under this Regulation.

Students are subject to the disciplinary jurisdiction of the Professors and of the Senatus Academicus. Among offences liable to be visited with severe academic penalties may be mentioned riotous or disorderly conduct within or without the University Buildings, copying at examinations, and mutilating or disfiguring books belonging to the University Library.

UNIVERSITY EXAMINERS.

PRELIMINARY EXAMINATION.

The Professors of or Lecturers on the several subjects, and five additional Examiners appointed by the University Court :—

FOR DEGREES.

The Examiners for Degrees are also appointed by the University Court.

1. *Faculty of Arts.*—The Examiners for the Degree in Arts are the Professors of or Lecturers on the Subjects and seventeen

additional Examiners, in whose appointment regard must be had to their eminence in the Subjects in which they are appointed to examine. No Professor, Lecturer, or University Assistant or Demonstrator can be appointed an additional Examiner.

II. *Faculty of Science.*—The Examiners for Degrees in Pure Science are the Professors of or Lecturers on the Subjects and eight additional Examiners. The Examiners for Degrees in Engineering are the Professors of or Lecturers on the Subjects and three additional Examiners. The Examiners for Degrees in Public Health are the Professors of or Lecturers on the Subjects and four additional Examiners. The Examiners for the Degree in Agriculture are the Professors of or Lecturers on the Subjects and ten additional Examiners.

III. *Faculty of Divinity.*—The Examiners for the Degree of Bachelor in Divinity are the four Professors of the Faculty and two additional Examiners.

IV. *Faculty of Law.*—The Examiners for the Degrees of Bachelor of Laws (LL.B.) and Bachelor of Law (B.L.) are the seven Professors of the Faculty, and three additional Examiners selected from those who have graduated in Laws.

V. *Faculty of Medicine.*—The Examiners for Degrees in Medicine are the Professors in the Faculty, with fifteen additional Examiners.

VI. *Faculty of Music.*—The Examiners for Degrees in Music are the Professor of Music and an additional Examiner.

VII. *For Schoolmaster's Diploma.*—The Examiners for the Schoolmaster's Diploma are the Professor of Education and an additional Examiner.

VIII. *For Title of Literate in Arts.*—The Professors of and Lecturers on the Subjects, and the additional Examiners for Degrees in Arts, &c.

ANNUAL CEREMONIALS FOR GRADUATION.

The relative precedence of each Faculty is as follows: 1. Divinity; 2. Law; 3. Medicine; 4. Arts; 5. Science; 6. Music. The Deans

take precedence in their respective Faculties followed by the Members of their Faculties in the order of the dates of their Commissions.

The Public Ceremonial of Graduation in Divinity, Law, Arts, Science, and Music is held annually in April.

Degrees in Law, Medicine, and Science are publicly conferred on the first of August in each year.

Graduates must appear on these occasions in the Academic Costume proper to their respective Degrees.

ACADEMIC COSTUME.[1]

Chancellor.—Robe of Black Brocaded Satin, trimmed with Gold Lace, and with Gold Frogs down fronts and on sleeves. Black Silk Velvet Trencher, with Gold Button and Tassel.

Vice-Chancellor.—Robe and Trencher same as Chancellor's, but trimmed with Silver in place of Gold.

Rector.—Black Silk Gown, with Crimson Silk Velvet sleeves. The gown is trimmed round the collar and down the front edges with Broad Gold Lace, and the sleeves round bottom with a narrower Gold Lace. Black Silk Velvet Trencher, with Gold Button and Tassel.

Principal.—Mauve Corded Silk Robe trimmed with Velvet to match. Black Silk Velvet Trencher, with Gold Button and Tassel.

Members of University Court.—Black Silk Robe, open sleeve, with Gold Frog on each sleeve.

With all of the above, Hoods appropriate to the Degree are worn.

The ordinary form of Gowns worn by Graduates of the University is the same in all the Faculties—viz., black silk or stuff, with long sleeves. The distinctive part of the costume is in the *Hood* appropriated to each Faculty. These Hoods are as follow:

LL.D.—Black *cloth*, lined with *blue* silk.
LL.B.—Black *silk*, lined with *blue* silk, bordered with white fur.
B.L.—Black *silk*, edged with *blue* silk three inches broad, trimmed with white fur.
D.D.—Black *cloth*, lined with *purple* silk.
B.D.—Black *silk*, lined with *purple* silk, bordered with white fur.
M.D.—Black *cloth*, with appended cape, lined and faced with *crimson* silk.
M.B. and C.M.—Black *silk*, lined with *crimson* silk, bordered with white fur.
Sc.D.—Black *cloth*, lined with *green* silk.
Sc.B.—Black *silk*, lined with *green* silk, bordered with white fur.
M.A.—Black *silk*, lined with *white* silk.
D.Litt.—Rich claret *cloth*, with *white* corded silk lining.
D.Phil.—Rich dark blue *cloth*, with *white* corded silk lining.

[1] Graduates are requested to appear for Graduation wearing one hood only, viz. the one which indicates the Degree they are about to receive.

Mus. Doc.—Rich scarlet *cloth*, with rich *white* corded silk lining.
Mus. Bac.—Scarlet *silk*, with *white* silk lining, bordered with *white* fur.

The full Academic Dress for Doctors is Gown of superfine Scarlet Cloth, loose sleeves, the cape and facings down the front covered, and the sleeves lined, with rich silk of the colour proper to the Degree. Birretum of black silk velvet.

REGULATIONS OF UNIVERSITY COURT.

I.—Absence of Professors.

24th Jan. 1887.

1. When any Professor shall be prevented from teaching his Class for more than three successive days, an arrangement shall be made for his Class being taught in his absence; and such arrangement shall be intimated to the Dean of his Faculty.

2. When any Professor has reason to expect that the demands of his Profession may involve absence from duty for more than four days in all in the course of a Session, an arrangement similar to that in Regulation 1 shall be made and intimated to the Dean of his Faculty.

3. No arrangement for teaching a Class in absence of the Professor shall continue longer than one week without the sanction of the Senatus Academicus; or, if there be no sufficiently early meeting of the Senatus, without the *interim* sanction of the Principal and Deans Committee.

4. When any Professor shall contemplate an absence from duty of more than one week, it shall be necessary for him to obtain the sanction of the Senatus for such absence, and for the arrangements for teaching his Class; and if his contemplated absence extend to four weeks or upwards, the sanction of the Senatus shall require the confirmation of the University Court.

5. No Professor shall employ any one other than a Colleague or University Assistant to teach his Class for him, without obtaining the sanction of his Faculty; and such sanction shall be communicated to the Senatus at its first meeting thereafter.

6. The Statement of the arrangements for teaching a Class in the absence of the Professor, submitted to the authorities of the University, shall specify the remuneration proposed to be given to the Professor's Substitute.

II.—Absence of Examiners.

12th June 1876.

1. Any University Examiner who finds himself prevented from being present at any Examination at which it is his duty to act, shall intimate this to the Dean or other Chairman of his Examining Board, who, on receiving such intimation, or otherwise becoming aware of the absence of the Examiner, shall, if possible, appoint a properly qualified Substitute to act for such Examiner.

2. In every case in which a person is appointed to act as Substitute for a University Examiner, and in which his Faculty, or Examining Committee, shall consider it necessary that the Substitute shall receive remuneration, the rate of remuneration to be paid by the Examiner (whether a Professor or Additional Examiner) to his Substitute shall be fixed by the Faculty, or Examining Committee, and shall be based upon the amount of the Fees payable to the Additional Examiners attached to the Faculty or Examining Committee.

3. All absences of University Examiners, their duration and cause, and the relative arrangements made, shall be immediately reported for approval to the Senatus Academicus by the Chairman of the Board to which the absent Examiner is attached; and a similar Report shall in every case of the absence of a University Examiner be made by the Senatus Academicus to the University Court; provided always that such arrangements shall receive immediate effect when circumstances do not permit the previous approval of the Senatus Academicus to be obtained.

4. In every case in which a Professor shall apply for leave of absence from his duties generally, provision shall be made, under the existing Regulations regarding leave of absence to Professors, for the performance of his duties as Examiner, as well as for the performance of his duties as Teacher; and provision shall be made for the remuneration of his Substitute in both capacities.

III.—Applications for Additional (or Non-Professorial) Examinerships in the University.

17th February 1890.

1. Applicants should lodge sixteen copies of their applications (one of which should be signed), and sixteen copies of any testimonials they may desire to present, with the Secretary of the Court, not later than one week before the day fixed for making appointments in each case.

2. Applicants who send in testimonials must not send more than four for any one appointment.

3. Persons may be appointed to examine in two of the thirteen Subjects of the Examinations for Graduation in Medicine, but not more, and not in more than one Subject in any one Division of the Examinations.

4. Every applicant for an appointment in Divinity must hold the degree of B.D. from a Scottish University.

Every applicant for an Examinership for Degrees in Law must be a Bachelor of Laws of a Scottish University.

IV.—Opening of New Classes.

6th May 1868.

No class in addition to those existing in the University shall at any time be opened,—whether for the purpose of dividing the course on a

subject necessary for graduation, or for teaching a class not requisite for graduation,—without the approval of the Senatus and the sanction of the University Court.

V.—Recognition of Extra-Academical Teachers. 16th July 1894.

1. Every applicant for recognition shall furnish for the information of the Authorities of the University :—

(1.) A Statement of his Registered Qualification or Qualifications, and of the name of the Office, or Appointment (if any) which he holds, as a Teacher of the Subject in which he requests recognition.

(2.) A Syllabus of his Course of Lectures; or, in the case of a Practical Class, information of a similar kind.

(3.) A Statement of the number of Lectures, and of the number of Written or Oral Examinations in the Course; or, in the case of a Practical Class, information of a similar kind.

(4.) A Short Description of his Accommodation for a Class; and of the Apparatus, Illustrative Specimens, Diagrams, and other appliances, at his disposal for teaching the Subject in which he desires recognition.

(5.) A Statement of his opportunities of studying the Subject, and of the length of time devoted thereto.

(6.) A Statement of the experience he has had in teaching the Subject.

(7.) A Note of the Titles of his published Contributions to the Science of the Subject.

(8.) A Statement as to whether his Course or Courses of Instruction have been already recognised by any University or other examining body, and, if so, what means were adopted for ascertaining his qualifications for teaching.

2. In the case of every Applicant for recognition residing in Edinburgh or its neighbourhood, an inspection shall be made of his teaching Appliances and Accommodation for teaching.

3. Every recognised Extra-Academical Teacher shall annually furnish the University with the information regarding his Course or Courses which is required from the University Professors as to (1.) The number of Students attending the recognised Course or Courses of Instruction; (2.) The number of meetings for ordinary Class Work in the Session, and in each week thereof; (3.) The number of Special Written Examinations; (4.) The system of conducting the ordinary Class Work, and the number of meetings devoted to each kind of work.

4. The Certificate of Attendance granted to Students by recognised Extra-Academical Teachers, should, in all cases, state the duration of the Course and the number of Meetings for Systematic, Tutorial, and Practical Instruction, respectively; the number of occasions on which attendance was ascertained, and the number of those occasions on

which the Student was present; and the number of Class Examinations held during the Course, and whether or not the Student has taken a satisfactory part in the work of the Course, including the Class Examinations, if any. The Certificate should also state the general scope of the Course; and, in particular, in the case of Chemistry, that the Course included Organic as well as Inorganic Chemistry; in the case of Midwifery, that it included the diseases of Women and Children; and, in the case of Practical Materia Medica, that it included Pharmacognosy, Pharmacy, Dispensing, and the writing of Prescriptions.

5. When application is made for the recognition of a Course taught by two or more Teachers in conjunction, information shall be given of the share to be taken by each Teacher in such conjoined Course; and the recognition of such conjoined Courses, and of each of the persons recognised as Teachers of a conjoined Course shall, *ipso facto*, terminate should one or more of the Teachers cease to conduct the Course, or should any material change be made in the share of each Teacher in the teaching of the conjoined Course.

6. The recognition of any Teacher who fails to furnish the information called for in Section 3, or an explanation relative to such failure; or who has ceased for the period of two consecutive Sessions to teach the subject on which he is recognised, shall, *ipso facto*, terminate.

University Buildings.

THE University Buildings at present consist of three distinct portions: (1) The College, or University (Old) Building, with Dome, in South Bridge Street; (2) The University New Buildings (School of Medicine), Teviot Row; and (3) The Music Class Room, Park Place.

I.—THE UNIVERSITY (OLD) BUILDING.

The University (Old) Building, which covers the site of "Kirk o' Field," the scene of the murder of Darnley, contains the University Library and Reading Rooms; the Class Rooms of the Faculties of Arts, Divinity, and Law, the Natural History, and some other Science Class Rooms; the Theological Library and Reading Room; the Examination Hall; the Physical, and the Geological and Petrological Laboratories; the Fulton Engineering Laboratory; the Physical, Geological, Fine Art, and Natural History Museums; the Senate Hall, University Court Room, and the Offices of the Senatus, of the University Court, and of the Students' Representative Council.

The work of teaching began in 1583, but until the latter part of the eighteenth century, the professors and students of the University had been very imperfectly housed. In a Memorial, dated 1768, Principal Robertson complains that the buildings, "poor in themselves, seem not to have been carried on according to any regular plan, such as takes place in other academical structures which have been erected on more opulent foundations; and hence the whole fabric has a mean, irregular, and contemptible appearance." At this time the number of students was estimated to be between six and seven hundred, and the number of professors was twenty-one.

Twenty years later this complaint was repeated by a writer in the "Scots Magazine," who notices that "in 1788 the buildings of the University are in the same ruinous condition that they were in in 1768, and the most celebrated University at present

in Europe is the worst accommodated." A scheme for rebuilding, which had been often discussed, was now taken seriously in hand by the Town Council, encouraged by promise of liberal aid from Government. A plan was obtained from Robert Adam, then at the height of his reputation, and the foundation stone of "the New College of Edinburgh" was laid with considerable pomp on November 16, 1789.

The original plans of Robert Adam, preserved in the Soane Museum in London, divide the space now occupied by the College buildings into two quadrangles, a smaller to the east, entered as at present from South Bridge Street, and a larger beyond it to the west, a block of academic buildings lying between. This arrangement was doubtless intended to obviate the difficulties caused by the rapid rise of the ground from north-east to south-west. Round the two courts thus formed there were not only to be Class Rooms, Museums, and a Library, but also houses for the Principal and Professors. The western side of the larger court was to be occupied by a large Graduation Hall and Chapel. Corridors and lobbies were to surround the great quadrangle, affording covered communication between the different class rooms. The buildings were begun at different points, chiefly on the eastern and northern sides, but had not proceeded far towards completion when the death of the architect in 1792, and soon afterwards a failure of funds, caused a cessation of the work. The fabric, partly old and partly new, remained in a very unsatisfactory state till 1815, when a Government Commission was appointed to collect funds and to carry out the undertaking, though in a somewhat modified form. An advertisement was then issued, inviting plans "for finishing the College of Edinburgh, on a reduced scale, leaving out the south front, and the cross building, which formed the small court in the original plan,—regard being always had to the part already executed, and to the preservation of the architecture of Mr Adam, as far as practicable." Out of nine sets of plans sent in, those of William Henry Playfair were finally selected, and under his superintendence the work progressed rapidly till its practical completion in 1828, by which date the New Buildings had cost in round figures some £161,000.

In the buildings as they appear at present, the general character of the whole design is due to Robert Adam. Some portions were actually erected by him, or completed after his death in accordance with his drawings. In other parts some modification of Adam's plans and elevations was necessary, while the designs of a third portion had to be furnished anew by Mr Playfair, who was careful in both these cases to provide that, in his own words, "the exterior of the buildings would be executed as nearly similar as possible to Mr Adam's design." The eastern exterior front, a very fine specimen of monumental architecture, with its monolithic columns 22 feet in height, was erected by Adam, and it may be noted that in the original drawings for this portion in the Soane Museum a certain amount of sculpture is introduced, which would have greatly enhanced the effect had it been added to the façade. Thus, statues were to have been placed upon the balustrade of the shallow balcony above the portico, one over each of the monolithic columns. Erected, too, by Adam, was the north-west corner of the great court, of which the circular Loggie form an admired feature, while he also carried out a considerable portion of the north front to what is now Chambers Street, and commenced the western block. The principal modification introduced by Playfair was the throwing of the two courts into one, which involved a reconsideration of the north and south interior elevations. Here Adam's plan was departed from, and the present elevations on these two sides are due to his successor. Playfair erected the elevations of the western block after Adam's designs with some very slight improvements ; but the interior treatment of the block, which he fitted up for the Natural History Museums, is his own, and the "Upper Museum," now the Natural History Laboratory, is a good specimen of his style. The "circular corners" which Adam had designed for his great court were retained by Playfair for his single quadrangle, but in order to fit them on at the eastern end, a new screen of masonry was erected on the inner front of the eastern portico. On the exterior, the north front is Adam's, and its comparative plainness is due to the fact that at the time only a narrow lane bounded the College on the side where now runs the broad

thoroughfare of Chambers Street. For the south exterior front Adam had given a handsome and ornate design, which was afterwards simplified by Playfair, but is still superior in treatment to the corresponding elevation to the north.

The difficulty of the levels in the quadrangle was overcome by Playfair in a most satisfactory manner. He designed a terrace surrounding the court, under which on the northern and eastern sides is a basement story, while access is gained from the area below by flights of steps. The whole provides a very suitable architectural base for the noble buildings surrounding the quadrangle.

The interior arrangements were considerably modified by Playfair, and his great achievement is the Library Hall, a fine gallery measuring 185 feet by 54 feet, with an arched ceiling enriched with cassettes, the effect of which is, however, marred by insufficient lighting. For all the ornamental details in the Library Hall and the Natural History Museum, Playfair furnished careful full size drawings.

The general effect of the buildings is simple and dignified, and their character thoroughly Academic. The material is mainly Craigleith stone, and the detail carving is well worked out. The single quadrangle, measuring 242 feet 6 inches from east to west, by 134 feet from north to south, has a very spacious effect, and is a great improvement on the original plan of 1789, though, as before remarked, the essentials of the design must be regarded as due to Adam. No finer specimens of the neo-classic style could be found than the interior elevations of the quadrangle, especially on the west, or the eastern front to South Bridge Street.

The Dome.

The original design of Robert Adam provided for a Dome over the eastern portal. The form he had sketched out was not, however, a pleasing one, and no steps were taken to carry out this feature until 1883, when funds came into the possession of the University, bequeathed for the purpose of erecting a Dome, by Robert Cox, Esq., W.S. It was then determined to

carry out the Dome on a new design prepared by R. Rowand Anderson, Esq., LL.D., Architect of the University New Buildings (School of Medicine). The present Dome, though in a less purely classical style than the Adam-Playfair building, is in itself a pleasing and effective structure, and a welcome addition to the architectural features of the city. An admirable finial to this fine architectural work is formed by a vigorous and athletic figure of Youth, bearing the torch of Knowledge, executed in bronze by John Hutchison, Esq., R.S.A. The Fine Art Museum is accommodated in the Dome.

II.—THE UNIVERSITY NEW BUILDINGS.

(SCHOOL OF MEDICINE.)

In 1869 the number of students had risen to more than fifteen hundred, and that of the Professors to thirty-three, while there were seventeen Class Rooms only for their accommodation. A Committee was therefore formed in 1873, and an appeal was made to the public for subscriptions for the purpose of purchasing a site for and erecting complete Class Rooms, Theatres, Laboratories, and Museums for the Faculty of Medicine, with the latest scientific improvements; for reorganising the Class Rooms of the College for the Faculties of Arts, Divinity, and Law; for providing increased and more convenient accommodation for the University Library; for erecting a University Hall for conferring degrees, for holding examinations and other public and academic ceremonials; and for improving to some extent the north front of the College building.

This appeal to the public resulted in subscriptions being received to the amount of £148,548, 2s. 5d., which, with a grant of £80,000 received from Government, and interest, rents, and value received for old material, amounted to the sum of £244,587, 4s. 8d.

These buildings (the University New Buildings, begun in 1878) were partly opened for teaching purposes in October 1880, and having been completed, were transferred by the Committee to the University in October 1888. They are situated on an irregularly shaped site formerly covered by Teviot Row,

Park Street, and Park Place, and were designed by R. Rowand Anderson, Esq., LL.D., Architect, and completed under his supervision.

In them are placed the Lecture Rooms, &c., of the Faculty of Medicine (excepting those of Botany and Natural History), the Museums of Practice of Physic, Anatomy, Chemistry, Obstetrics, Materia Medica, and Surgery; a Students' Reading Room, Students' Common Room, Faculty of Medicine Reception and Reading Room, and Office of the Faculty.

The style of architecture adopted by Dr Anderson is Italian of the Cinque Cento period. This style, developed in the end of the fifteenth and beginning of the sixteenth centuries, may be regarded as intermediate between the Gothic and the stiff Palladian work, which aims at a mere manipulation of the five orders; and it naturally commends itself on account of its plasticity and adaptability to varied internal arrangements. The main frontage presents, as its central feature, a slightly projecting elevation, pierced by the archway which forms the principal entrance. Over the arch is an ornate window, flanked by pilasters, between which are niches for statuary; and the whole is surmounted by a bold semi-circular pediment, intended to be occupied with a group of sculpture. The façade is three storeys in height except in the projecting west wing, which has an additional floor. On the ground floor the windows are square, and are surrounded with simply moulded architraves. Above these runs a well-marked string course ornamented with dentils. The first floor windows are round-headed and furnished with architraves, their arches showing boldly in the masonry of the wall. Next comes a broad frieze, relieved at intervals with circular panels, in which carved work will be placed. Over this the string course is repeated; and the upper floor windows are separated by pilasters, each being divided by a shaft which supports a circular tracery in the window head. The wall is finished at the top with architrave, frieze, and cornice, and crowned with a low-pitched roof, covered with red tiles. The external features and their relative positions have been influenced by the internal arrangements of the building.

THE M'EWAN HALL.

The building which completes the group of the University New Buildings, or School of Medicine, is the M'Ewan Hall, the munificent gift of William M'Ewan, Esq., M.P., Edinburgh. Dr R. Rowand Anderson was also the architect of this building, which stands on the ground formerly occupied by Park Street. The Greek Theatre forms the basis of the design. The internal diameter of the semicircle is 134 ft., and the dimension the other way, including the platform recess, is 107 ft.; and the height from floor to ring of centre light is 90 ft. On the north-west corner, and connecting the Hall with the present buildings, is placed the Campanile Tower, which is 32 ft. square at the base, and rises to the height of 275 ft. The tower will, in the meantime, only be carried up to the height of the other buildings, but it is hoped that at no distant date this noble part of the design may be completed. At the south-west corner is placed the entrance to the principal staircase, and on the outer circumference of the circle are placed two double stairs for access to the galleries. No fewer than seven entrances to the Hall are provided, so that easy access and speedy exit may be secured. One of the chief of these entrances is in the base of the tower. The Hall is capable of holding 3000 people, and in designing it the architect has had in view the special object which it is intended to serve. In it Degrees will be conferred, and Examinations and all public Academic Ceremonials and Concerts connected with the University will be held. A large platform and ample floor space and gallery accommodation have accordingly been provided. Provision has also been made for the accommodation of a great organ and an orchestra of over 300 performers. The space is apportioned as follows :—A flat area, to be occupied by the Graduands on ceremonial days; a raised amphitheatre of seats following the sweep of the semicircle, and two galleries, also semicircular in form, rising one above the other. Immediately at the back of the amphitheatre is a vaulted fireproof corridor, 12 ft. wide, extending round the half circle from the north-west to the south-west entrance. Above it is the first

gallery. The platform is placed on the straight side of the Hall, and is of ample dimensions, with appropriate seats for the Chancellor, the Rector, the Principal, the University Court, the Senatus, the Curators, &c. The system of construction is really that of the double wall. The inner wall which carries the roof is opened up with pillars and arches from the level of the first gallery, thrusts being transmitted by flying buttresses to the outer wall. The roof is domical in form, is deeply panelled, and pierced at the base with circular lights, and has in the centre a skylight 25 feet in diameter. It will be constructed entirely of steel. From the floor to the roof the Hall will be 90 feet in height, and with its imposing dimensions and tiers of stone pillars and arches, it will be one of the most striking and handsome Halls in the kingdom. The external elevation will conform to the early Italian of the rest of the buildings. The great circle of the Hall is divided vertically by powerful buttresses, while horizontally the lines correspond with those of the west façade. The elevation is divided into three stages ; the first is panelled with circular lights, the second is a blank wall, while the third stage is arcaded—there being three arches between each buttress. On the two principal stages the buttresses have niches for figures. The wall is surmounted by a cornice and balustraded parapet, and above this appears the clerestory, which is carried on the inner circle, while over all rises the domical roof. The Hall was begun in 1889, and will probably be completed in 1895.

III.—REID SCHOOL OF MUSIC.

The School of Music, situated immediately to the south-east of the University New Buildings, was built in the year 1858, from the designs of the late David Cousin. It contains the Music Class Room, with an organ of four manuals and sixty-six stops, enclosed in a handsome carved oak case ; and a Museum containing an interesting collection of acoustic and antique musical instruments.

The architecture of the building is studied from the best and purest examples of the Italian Renaissance of the early part of the sixteenth century.

University Library.[1]

THE Library Committee consists of not more than seven members of the University or others, not being members of the Senatus Academicus, appointed by the University Court, and of such number of members appointed by the Senatus Academicus as shall be double the number appointed by the Court. The said Committee shall be charged with the immediate superintendence of the University Library, and of the contents thereof, and of any libraries acquired, or to be acquired, for the use of the University or of any class therein. The members of the said Committee, in the proportions aforesaid, are appointed by the University Court and Senatus Academicus respectively at their first meeting after the commencement of the Winter Session in each year.

LIBRARY COMMITTEE.

Principal Sir WILLIAM MUIR,
Sir THOMAS CLARK, Bart., } *Joint-Conveners.*

Professor EGGELING,
J. BURGESS, C.I.E., LL.D., } *Joint-Vice-Conveners.*

Rev. J. Sutherland Black, LL.D.; Professor Crum Brown; James Taylor Brown, Esq., LL.D.; Professor Chrystal; James Colston, Esq.; Professor Copeland; Professor Cossar Ewart; Professor Flint; Professor Goodhart; Rev. Edward F. Hoernle, M.B.; Professor Kirkpatrick; Professor Niecks; J. Balfour Paul, Esq.; Professor Prothero; Professor Rutherford; Professor Simpson; Professor Tait.

In 1580 Mr Clement Littil or Little, left his books to "Edinburgh and Kirk of God thair to reman." This collection of

[1] The names of the present Librarian and of the Assistant Librarians are given at p. 10. The names of the Librarians from 1635 to the present time will be found in previous Calendars, and also in the Historical Appendix to List of Graduates of the University published in 1889, page 113.

about 300 volumes, chiefly theological (see list in Miscellany of the Maitland Club, vol i., 1834), was a few years afterwards transferred by the Town Council to the University, and thus became the nucleus of the University Library, which was gradually augmented by donations from Citizens of Edinburgh and from alumni of the University, and by annual contributions of Students when they took the Degree of Master of Arts.

The celebrated Poet, Drummond of Hawthornden, bequeathed his library to the University in 1627; and the gift is valuable, both from the eminence of the donor's name, and from the rare specimens of early literature with which the collection is enriched (see *Auctarium Bibliothecæ Edinburgenæ*, 1627).

Among donors may be specified, for the extent and value of their benefactions, Principal Adamson, Dr Robert Johnston, a physician in London; the Rev. James Nairne of Wemyss, in Fife; Dr John Stevenson, Professor of Logic and Metaphysics in the University; and Dr William Thomson, Professor of Anatomy in the University of Oxford. In 1872, the Library received a valuable donation from J. O. Halliwell, the eminent Shakespearean critic, of works relating to Shakespeare, collected at great cost. In 1875 a large collection of Persian and Arabic MSS. was presented by Mr J. B. Baillie of Leys. In 1879 the bequest of an extensive collection of MSS. was received from the executors of David Laing, LL.D. In 1880 the collection of works on Economic Science formed by Professor Hodgson were presented to the Library by Mrs Hodgson. In 1882 a valuable collection of works on Sanskrit Literature was presented by the family of Dr John Muir. In 1886 Mr Thomas Stratton bequeathed to the Library 110 works bearing on the study of Celtic. In 1889 William Mackinnon, Esq. of Balmakill, having purchased the library of the late Dr Cameron of Brodick, an eminent Celtic scholar, at a cost of £600, placed the books at the disposal of the University; and the same year saw the bequest of a collection of MS. Shakespeariana by Mr Halliwell-Phillipps, and the presentation, by Mrs Wilson, of a number of volumes from the library of the late Professor Wilson. A "Lorimer Collection," in memory of the late Professor Lorimer and in

accordance with his understood desire, was presented by his son-in-law, Sir David Chalmers.

The University Library contains about 187,000 printed volumes, and about 7500 MSS., many of which are of great interest and value.

The University possesses a number of valuable pictures and busts, which are kept in the Library and the Senate Hall.

The Library Hall, and the suite of rooms connected with it, occupy the south side of the College quadrangle.

The following are the Regulations as to the custody and management of the Library enacted in 1895 (Ordinance No. 64, Universities Scotland Act, 1889) :—

I. The Librarian shall have the ordinary management of the Library of the University, subject to the superintendence of the Library Committee appointed under the provisions of Ordinance No. 8 [St Andrews, Aberdeen, and Edinburgh, No 1.—Libraries and Museums].

II. The Librarian, and such Assistant-Librarians as the University Court, on the report of the Library Committee, may think necessary, shall be appointed by the University Court. The University Court shall also have the power of suspending or dismissing such Librarian and Assistant-Librarians.

III. All books ordered for the Library by the Library Committee shall be sent direct to the Librarian, and all books received by him shall be forthwith catalogued by him in such manner as the Library Committee may direct, and stamped with the Library stamp ; and no person shall be allowed to use or borrow any book until it has been entered in the catalogue and stamped.

IV. The Librarian shall, with the approval of the Library Committee, from time to time prepare a list of such books, manuscripts, and other works as cannot, in consequence of any deed of gift or otherwise, be lent out of the Library : and the Library Committee shall from time to time make such regula-

tions as they shall think expedient for allowing access to such works for consultation.

V. Manuscripts, rare books, works of reference, and such other works as the Library Committee shall determine, shall not be lent out of the Library, except under regulations to be made by the Library Committee and approved by the Senatus Academicus and the University Court; and, in addition to such general regulations, the Library Committee may, in each individual case of borrowing such works, impose such special conditions as they may think necessary or expedient: Provided always that every such special permission and all such additional conditions imposed by the Library Committee shall be entered in the Minute-Book of the Committee.

VI. It shall be in the power of the Librarian at any time to withdraw any work from circulation, subject to appeal to the Library Committee.

VII. It shall be in the power of the University Court, after consultation with the Senatus Academicus, and on the report of the Library Committee, to sell or exchange such works as they consider it in the best interests of the Library to dispose of.

VIII. A general inspection of the Library shall take place at such times and during such periods as the University Court, on the report of the Library Committee, shall determine, and all works whatsoever, and by whomsoever borrowed, shall be returned to the Library before the commencement of such periods, under a penalty previously fixed and publicly notified by the University Court.

IX. The Library Committee shall frame regulations to be approved by the University Court, under which the persons hereinafter mentioned may respectively borrow or consult books. Such regulations shall prescribe, *inter alia*, (*a*) the number of books which the said persons shall be entitled to borrow; (*b*) the period for which they shall be allowed to retain them; (*c*) the penalties to be imposed in the event of their failure to return

books in due time, or in the event of books being lost or injured.

The persons entitled to borrow books shall be :—

1. Members of the Senatus Academicus and University Lecturers.
2. University Assistants and Examiners.
3. The Librarian and Assistant-Librarians.
4. Matriculated Students.
5. Extra-academical Teachers, recognised by the University Court, in the town in which the University is situated.
6. Students enrolled in any Scottish University as attending the lectures of extra-academical teachers in the town in which the University is situated, and who are already entitled by Ordinance to the use of the Library.
7. Persons who have retired or who shall hereafter retire from the office of Principal or Professor.
8. Members of the University Court.
9. Members of the General Council.

Provided that no member of the University Court or of the General Council shall be entitled to obtain from the University Library books required by the Teachers or Students of the University in the prosecution of academic work and research, and that it shall be in the discretion of the Librarian, subject to appeal to the Library Committee, to decide from time to time what books are so required.

In fixing the number of books to be borrowed by the aforementioned persons respectively, due regard shall be had to the preferable claims of those engaged in teaching and studying in the University.

X. Members of the General Council shall be required, as a condition of exercising the privilege of borrowing books, to pay such subscription as the University Court shall fix from time to time.

XI. The University Court shall determine what sum, if any, shall be deposited by those entitled to borrow books.

XII. The Library Committee, with the approval of the University Court, may admit to the use of the Library, upon such conditions as to subscription and otherwise as they may require, members of the General Councils of other Scottish Universities and Graduates of the University who, by reason of being under the age of twenty-one years, are not qualified to be members of the General Council.

XIII. It shall be in the power of the Library Committee from time to time to grant the use of the Library to such extent and on such conditions as they shall think expedient to persons who may not be members of the University, for purposes of literary research, and the names of those privileged readers shall be reported annually to the University Court.

XIV. So long as any Library subscription or any fine incurred remains unpaid, and so long as any person continues in possession of a book which he is not entitled to retain, the right of the defaulter to the use of the Library shall be suspended and remain in abeyance.

XV. The Library Committee shall, in an annual report to the Senatus Academicus, furnish information as to :

1. The state in which the borrowing registers are kept, and whether there is in use any finding list or other means for facilitating the recall of books.
2. The condition of the various catalogues, whether they are brought up to date or not : the amount of arrears, if any, of the cataloguing of the titles of current acquisitions ; and what portions of the Library, if any, remain uncatalogued.
3. The amount of money spent in the purchase of books and periodicals respectively ; and how the expenditure has been disributed among the several departments of literature and science.

XVI. At such time as shall be fixed by the Senatus Aca-

demicus the Librarian shall report to the Senatus in reference to the year then ended :—

1. The particulars of every case of admission to special reading privileges.
2. The particulars of every case in which the right to the use of the Library has been suspended or is in abeyance.
3. Every case in which a book belonging to the Library has been replaced at the expense of a borrower.
4. The titles of all books belonging to the Library, known to have been lost or seriously injured, or found at the time of inspection to be amissing.
5. The titles of all books entered as missing in previous reports which have been recovered.
6. The number of accessions to the Library acquired by purchase and received in donation respectively.
7. Any other matter which the Librarian may think it of importance to bring under the notice of the Senatus Academicus, or which he may be directed by the Library Committee to report.

The Senatus Academicus shall forward the report to the University Court.

In accordance with the terms of the above enactment, the following Regulations are at present in force :—

I. The Library is open for the purpose of giving out Books to Readers, either on loan or for reference, every lawful day during the Winter Session, from Ten to Four o'clock, except on Saturdays, when it is closed at One o'clock, and during the Summer Session and Autumn from Ten to Three, and on Saturdays from Ten to Twelve, except as aftermentioned. During the month of August, and during the Christmas vacation and the week in which the Spring Holiday occurs, the Library (not the Reading-Rooms) is open from Ten to One, except on Saturdays and

holidays. The holidays are—the Queen's Birthday, Christmas Day, New Year's Day, Good Friday, and the Edinburgh Spring and Autumn Holidays. The Students' Reading-Room is also open during the Winter Session every evening (Saturdays excepted), from Eight to Ten P.M. A special Reading Room has been set apart for Lady Students ; and the general Reading Room is open to them at night.

II. Each Member of the Senatus Academicus, and each University Lecturer, is entitled to have in his possession at one time twenty-five volumes, and not more.

III. Each University Assistant is entitled to have in his possession at one time ten volumes, and not more.

IV. Each University Examiner is entitled to have in his possession five volumes, and not more.

V. The Librarian is entitled to have in his possession at one time ten volumes, and not more ; and each Assistant-Librarian is entitled to have in his possession at one time four volumes, and not more : Provided always, that all books borrowed by the Librarian, or by any Assistant-Librarian, are regularly entered in the Library Books, in the same manner as books borrowed by other persons.

VI. (1) Every Matriculated Student is entitled to have in his possession two volumes at one time ; and is entitled to retain any book for two weeks from the date of borrowing ; and further, to re-borrow any book for successive periods of two weeks, unless an application for the same shall, in the meantime, have been made by another person entitled to the use of the Library. In exceptional cases Students may be allowed by the Library Committee to be in possession of more than two volumes at a time : Provided always, that every Student, before borrowing books, must exhibit his Matriculation Ticket, and at least one Professor's Ticket, and deposit £1 at the Matriculation Office, after which his name will be enrolled in the Library books. (2) No certificate of attendance upon a class may be

granted by a Professor to any Student without the production of evidence to the Professor that the Student has duly returned all books which he may have borrowed from the Library.

VII. Each extra-academical teacher, recognised by the University Court, is entitled, on payment of an annual subscription of ten shillings and sixpence, to have in his possession five volumes, and not more.

VIII. Each Student enrolled as attending the lectures of an extra-academical teacher in Edinburgh (under Ordinance No. 16, Edinburgh, No. 1, Section VIII., Sub-section 5) is entitled to the same Library privileges and subject to the same regulations as a matriculated Student ; and no certificate of attendance on the lectures of any such teacher may be given to any Student so enrolled without the production of evidence to the teacher that the Student has duly returned all books which he may have borrowed from the Library.

IX. Each person who has retired from the office of Principal or Professor is entitled to have in his possession ten volumes, and not more.

X. Each Member of the University Court and of the Library Committee is entitled to have in his possession ten volumes, and not more.

XI. Each Member of the General Council is, in each year in which he shall have paid a subscription to the Library of ten shillings and sixpence, entitled to have in his possession at one time four volumes, and not more : Provided always, that a payment, instead of such yearly subscription, of a composition of five guineas entitles a person to the like privilege for life. In regard to the use of the Library by Members of the General Council, the year is held to date from the day on which the subscription is paid, which shall be duly recorded on the reader's ticket and in the Library Books.

XII. In consideration of the annual payment of five pounds by the Royal College of Surgeons to the University, each Fellow

of the College resident within ten miles of Edinburgh, is, in each year in which he pays a subscription of one guinea to the Library of that University, entitled to have in his possession at one time ten volumes, and not more. The College of Surgeons and the members thereof, as such, are not entitled, in virtue of any former agreement or otherwise, to any privilege or use of the Library, except as herein is specially provided, and as regards such use of the said Library the year is held to date from the *fifteenth day of October.*

[This annual payment has been in abeyance since March 1887.]

XIII. Subject always to the provision as to the return of books at the annual period of inspection, every person in each of the above classes is entitled to retain each book for one month from the date of borrowing, if the book has been borrowed at any time between the *first day of October* and the *thirtieth day of April inclusive*, and for two months from the date of borrowing, if the book has been borrowed at any time between the *first day of May* and the *thirtieth day of September inclusive;* and further, after the expiration of such period of one month or of two months, as the case may be, he may retain each book until the annual period of inspection in October, unless notice is received by him from the Librarian, requiring the return of such book. The form of notice requires the return of the book within a certain short period, to be specified therein, under a penalty of not less than one shilling a volume, if the book be not returned within such period, and after the expiration thereof, under a further penalty of sixpence a volume for each day, as long as the book is not returned, until the amount of the fine exceeds the sum for which the book can be replaced in the Library; such penalties to be also specified in such notice.

XIV. A general Inspection of the Library of the University, and of the record kept of the borrowing and returning of books, takes place (as above provided by Section VIII.) *annually in the first week of October.*

XV. During the period of the annual Inspection, the Library is closed, and all works whatever, and by whomsoever borrowed, must be returned to the Library before the commencement of such period, under a penalty of not less than one shilling a volume ; and in the event of any volume not being returned before the expiration of one week after the last day of the inspection, the fine is repeated weekly until such volume is returned, or until a copy of the work of equal value is, at the expense of the borrower, placed in the Library in its stead : Provided always, that the amount of the fine in the case of works borrowed by special permission as aforesaid, may be fixed either by general regulation of the University Court, or by special condition imposed by the Library Committee in any individual case.

READING ROOMS.

I. Old Buildings.

There is attached to the Reading Room of the University Library a separate collection of books set apart for the consultation of Students.

Any Student wishing to consult books from this Reading Room Collection must insert in one of the slips provided for the purpose, Matriculation Number, Name and Residence, and the Title of the Book to be consulted, and present the slip to the Librarian in attendance.

Each slip so presented will render the person who has signed it responsible for the book named upon it. The counterfoil of the slip should, therefore, in each case be re-claimed from the Librarian in attendance, when the Book is returned, or whenever the Book applied for is not available.

Every volume must be returned by the person who has used it, before he leaves the Reading Room. Students are forbidden to leave on the table the Books used by them ; they are required to place them in the Librarian's hands, and to demand back the counterfoils of their slips. To prevent confusion, this should be

done a few minutes before the close of each hour by those who have to attend classes at the commencement of the next hour.

In addition to the books in the Reading Room Collection, each Student is allowed to consult in the Reading Room Two Volumes daily from the General Library: Provided always, that he has handed in slips applying for them on the previous day, before 2 o'clock P.M. To such books the same rules will apply as to those consulted from the Reading Room Collection.

No conversation, or noise likely to disturb readers, is permitted in the Reading Room.

The Librarian is responsible for the management of the Reading Room. Any point of difficulty that may arise must be referred to him for decision, or, if necessary, through him to the Library Committee.

Students, on first applying for books in the Reading Room, must exhibit their Matriculation Tickets for Registration in the Book kept for the purpose in the room.

All books taken into the Room from the General Library shall be carefully examined and returned to their place in the General Library each day. No books shall be issued from the General Library, for use in the Reading-Room, after 3.20 in Winter or after 2.30 in Summer; and all books from the General Library shall be given up in the Reading-Room at 3.45 in Winter and 2.45 in Summer.

The Reading-Room is open every night of the week except Saturday during the Winter Session, between 8 and 10 P.M., and is available for either men or women Students. Books required from the General Library must be demanded in writing before 3 o'clock.

A Special Reading-Room has been set apart for the Ladies during the day.

II. New Buildings.

In the New Buildings is a Students' Reading-Room containing Books of Reference for those attending the Classes in the Faculty of Medicine. The Regulations as to consulting Books are similar to those in the Reading-Room in the Old

Buildings. See p. 58. It is open daily, from 9 A.M. to 5 P.M., except on Saturdays, when it is closed at 12 noon. It is open in September and during the week in which the Spring Holiday occurs (Saturday excepted), from Ten to One. It is closed during August and the Christmas Holidays, and on holidays and Saturdays during the Summer vacations.

THEOLOGICAL LIBRARY.

This Library was founded in 1698 for the special use of Students in Theology. It contains above 10,000 volumes. The management, by the amended constitution (1863), is vested in a Committee of six Curators, chosen by ballot, by the Cives of the Library, from their own number. Students of Divinity of this University, or any who have been Students of Divinity at any Scottish University, are admitted as Cives of the Library on payment of an annual contribution of two shillings and sixpence in the former case, and of five shillings in the latter. No one who, when a Student of Divinity in this University, has failed to enter as a Civis, is in any after year allowed to do so, until he has paid up the arrears of two shillings and sixpence for each year of his Theological Course in which he has failed to pay the said contribution. No Civis can be elected a Curator unless he be at least in the second year of his attendance at the Divinity Hall. The election takes place in the second week of December, one-third of the Curators going out annually by rotation. The Curators elect one of their own number to be Treasurer. The Curators and Treasurer report the state of the funds, &c., to the Cives, the Theological Faculty, and the Senatus Academicus. The books purchased are selected by the Curators, subject to the approval of the Faculty of Divinity, and are restricted to theological works, and works subservient to theological study. The Professor of Divinity, who is *ex officio* Honorary Librarian, appoints annually an acting Librarian. Books may not be kept out of the Library longer than two months.

PORTRAITS AND BUSTS IN THE SENATE HALL, LIBRARY, COURT ROOM, ANATOMICAL MUSEUM, MUSIC CLASS ROOM, AND DOME.[1]

I. PORTRAITS.

There are twenty-seven Portraits of Benefactors, Principals, Professors, and others, by Raeburn, Sir John Watson Gordon, and other Artists, in the Senate Hall, four in the Library, sixteen in the University Court Room, and one in the Music Class Room.

Portraits presented since 1890.

In Senate Hall.

James Lorimer, M.A., LL.D., Dr Jur., Professor of Public Law (1862-1890).

In Court Room.

General Sir Joseph Straton, Benefactor of the University, presented by Colonel G. L. Fraser, on behalf of the late Miss J. Straton Graham of Kirkside.

II. BUSTS.

There are forty Busts in the Upper Library Hall, two in the Anatomical Museum, and one in Room in Dome.

In order to honour and perpetuate the names of Benefactors who have founded Scholarships, Bursaries, or new Chairs in the University, the University authorities have made arrangements for placing their Busts or Portraits in the Library and University Court Room.

Regarding as Benefactors the eminent Professors who have elevated the character of the University by their writings or discoveries, the University desires to procure Portraits or Busts of James and David Gregory, Colin Maclaurin, Matthew Stewart, Dr Cullen, Joseph Black, Dr James Gregory, Dr Alison, Dr Chalmers, Sir Chas. Bell, Lord Woodhouselee, Dr Thos. Chas. Hope, Professors Ross, Macdougall, Muirhead, Sellar and Campbell Fraser.

Busts presented since 1890.

In Library Hall.

Rt. Hon. John Inglis, D.C.L., LL.D., Lord Justice-General, Chancellor of the University (1868-1891).

John Rae, M.D., LL.D., Arctic Explorer.

James Miller, M.D., LL.D., F.R.S.E., &c., Professor of Surgery in the University (1842-64).

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[1] There is a separate printed Catalogue of the Portraits and Busts in the University, and of the Torrie Collection. A detailed Catalogue will also be found in the Calendar for 1890-91, p. 61, as well as in the previous Calendars.

TORRIÈ FINE ART COLLECTION.

Sir James Erskine of Torrie, by a Will, dated April 1834, bequeathed to the University his Pictures, Bronzes, and Marbles, "for the purpose of laying a foundation for a GALLERY for the encouragement of the Fine Arts." The collection is at present temporarily deposited in the National Gallery until funds can be obtained for its suitable display in the College, and for carrying more fully into effect the intentions of the testator.

The Pictures, forty-five in number, include choice specimens of the works of different Masters, especially in the Flemish and Dutch Schools. The Marbles, seventeen in number, and twenty-three Bronzes, have been chosen with a correct appreciation of the merits of this department, and the whole collection reflects credit on the taste and public spirit of Sir James Erskine.

Museums.

A MUSEUM COMMITTEE, consisting of three members of the University or others, not being members of the Senatus Academicus, appointed by the University Court, and of six members appointed by the Senatus Academicus, is charged with the immediate superintendence of all Museums belonging to the University, and of the contents thereof, and of any collections, furniture, or apparatus, or objects acquired, or to be acquired, for the use of the University or of any class therein. The members of the Committee, in the proportions aforesaid, are appointed by the University Court and Senatus Academicus respectively at their first meeting after the commencement of the Winter Session in each year.

Members of Committee appointed by the University Court.

The Right Hon. the Lord Provost; Patrick Heron Watson, M.D.; John Duncan, M.D.

Appointed by the Senatus Academicus.

Professors Tait, Geikie, Fraser, Greenfield, Sir William Turner, Rutherford.

The University contains the following Museums, several of which belong partly to the Professors of the respective subjects :—

1. The NATURAL PHILOSOPHY MUSEUM contains a large and very valuable collection of physical apparatus, chiefly of modern construction.

2. MUSEUM OF MUSIC AND MUSICAL INSTRUMENTS. — A very interesting and valuable collection of acoustic and musical instruments.

3. Geological Museum.—This collection is for class purposes. It exhibits the characters of minerals and rocks, and the typical fossils of the different geological systems.

4. Fine Art Museum.—A small collection of casts, photographs, and drawings, illustrating the main points in the history of classical art. The collection is housed in the Dome above the portal of the University.

5. Museum of the Royal Botanic Garden. — This Museum is open to Students.

6. The Physiological Museum.—This Museum contains a large collection of Physiological Instruments, Microscopes and Microscopical Appliances, Diagrams, and Preparations, partly belonging to the University and partly to the Professor.

7. Practice of Physic Museum.—The Practice of Physic Museum contains pathological specimens, drawings, models, diagrams, and charts, the property of the Professor.

8. The Anatomical Museum.—This Museum was founded in 1800 by Dr Monro, *secundus*, who presented his own Anatomical Collection, and that of his father, to the University, "to be used by his future successors in office for the purpose of demonstrating and explaining to the Students the structure, physiology, and diseases of the human body." In the year 1859, Sir David Monro, M.D., presented a collection of anatomical preparations, which had been formed by his father, Dr Alexander Monro, *tertius*. Numerous additions were also made to the Museum by the late Professor Goodsir, more especially in the department of Comparative Anatomy, and on his death the Senatus Academicus purchased from his representatives his Private Museum, which has been added to the Collection. The Museum now contains several thousand specimens in illustration of Human Anatomy, both normal and pathological, and of Comparative Anatomy.

The Conservator will be glad to receive contributions of rare and interesting specimens from Graduates and former Students of the University. He is especially desirous of making the

collection thoroughly representative of the osteology of the different Races of Men, and requests the gift of skulls and other bones of the skeleton from present and former pupils.

The Collection was transferred in the Session 1884-5 to the University New Buildings for the School of Medicine in Teviot Row, where it is arranged in a large and handsome Hall possessing two galleries. It is open at certain hours to all matriculated students. The pathological collection is placed in the upper gallery. The spirit-preparations in illustration of normal Human and Comparative Anatomy are arranged in the lower gallery. The osteological collection is disposed in the cases on the floor of the Museum, and suspended in the centre of the Hall. In 1887 the Henderson Trustees committed to the custody of the Conservator of the Museum their valuable collection of crania and casts.

Conservator of the Museum, the Professor of Anatomy; Assistant-Conservator, Mr James Simpson.

9. Chemistry Museum.—Sir Lyon Playfair, on his resignation of the Chair of Chemistry, presented to the University the collection of chemical substances which he used in illustrating his lectures. This collection has been from time to time increased by presents from chemical manufacturers and others, and also by the addition of substances prepared in the University Laboratory.

10. The Obstetrical Museum, with the exception of a few wet and dry preparations left by Professor Hamilton, contains instruments, preparations, models, and diagrams, collected by Sir James Y. Simpson, and added to by the present Professor of Midwifery, to whom they belong.

11. The Museum of Natural History.—The old Museum of Natural History was established in 1812 in connection with the University. It contained Zoological, Geological and Mineralogical Collections. The greater portion of it was formed by the exertions of Professor Jameson, who was for fifty years Professor of Natural History and Regius-Keeper of the Museum. In 1854 the Museum was transferred by the Town Council, at that time

the Patrons of the University, to Government, under whose control it has since continued, and the whole of the collections were at that time removed from the rooms occupied by them in the University to the Natural History Department of the New Museum of Science and Art. They are still, however, available for the educational purposes of the University, and are freely accessible to the Students attending the classes of Natural History and Geology.

A Zoological Museum is now being formed in the University. Graduates, former Students and others interested in the Natural History Department will greatly aid in this important undertaking by presenting specimens to the Keeper—the Professor of Natural History.

12. Materia Medica Museum. — The Materia Medica Museum contains one of the most complete collections of medicinal and food substances in this country. The collection was founded by Professor Andrew Duncan. His successor, Sir Robert Christison, during his long incumbency of the Professorship, added a large number of valuable specimens, which were, for the most part, mounted by himself with singular neatness. The present occupant of the Chair has made further extensive additions. The Museum has been greatly enriched by interesting donations to the Professor from former members of the Class in all parts of the world. Besides the general collection, there is a Students' Reading Museum, containing specimens of the medicinal substances usually employed in this country, which has been formed and arranged by the present Professor of Materia Medica.

13. Surgical Museum.—This collection was formed by the late Professor Spence, and has been largely extended by the present Professor, to whom it now belongs. During the last five years many additions have been made, both of pathological preparations and of plaster and gelatine casts, illustrative of Surgical Anatomy and Pathology. A complete catalogue may, on application, be consulted by practitioners of medicine.

THE ROYAL BOTANIC GARDEN AND ARBORETUM.

The Royal Botanic Garden and Arboretum, Inverleith Row, is connected with the University, in so far as the Professor of Botany delivers his Lectures in the Lecture-hall in the Garden. The grounds extend to about 60 acres, and there is an extensive range of Greenhouses and Hothouses, with a large Palm-house. There is an arrangement of herbaceous plants according to the Natural System.

The Garden is open daily. Specimens of plants for study are supplied to Students so far as practicable.

The Botanical Museum in the Garden is open daily to Students, and the University Herbarium, which is placed in the Garden, may also be consulted between the hours of 10 and 1, and 2 and 5, under the direction of the Professor or the Curator.

The Botanical Laboratory in the Garden is open daily for work and original research.

I.

FACULTY OF ARTS

(INCLUDING THE DEPARTMENTS OF LANGUAGE AND LITERATURE, MENTAL PHILOSOPHY, SCIENCE, AND HISTORY AND LAW.)

1895-6.

Dean.

PROFESSOR CHRYSTAL, LL.D.,
5 *Belgrave Crescent, Edinburgh.*

Faculty of Arts.

Students who do not intend to graduate in Arts may attend any of the Classes in the Faculty on payment of the Matriculation and Class Fees and without having passed any Preliminary Examination. Those who intend to graduate must pass the Preliminary Examination. The Classes in the Faculty of Arts are now open to Women, with the exception of a few classes in which provision has not yet been made for teaching them in the University. Provision has, however, been made to admit Women to Graduation in Arts who have received the requisite instruction at certain other Academic Schools in Edinburgh in the subjects in which classes are not open to them in the University. See Regulation, page 132.

The classes will be opened as follows, and will meet daily (Saturdays excepted), unless otherwise stated. They will meet for the last time before the Christmas vacation on Friday, 20th December; will re-assemble on Tuesday, 7th January 1896, *and will be closed on Friday, 27th March* 1896. *The Annual Graduation Ceremonial in Arts, &c., will be held on Saturday, 11th April* 1896.

Programme of Classes.

WINTER SESSION, 1895-96.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees. £	s.
I.—Department of Language and Literature.				
Junior Latin	15 Oct., 9 o'cl. & also on Mon. & Wed. 11 o'cl.	Prof.	3	3
Senior Latin[1]	15 Oct., 10 ,,		3	3
Honours Latin	17 Oct., 12 ,,		3	3
Junior Greek	16 Oct., 10 ,, & also on Tues., Thurs., & Fri., 11 o'cl.	Prof. Butcher	3	3
Senior Greek[1]	15 Oct., 11 o'cl.		3	3
Honours Greek	16 Oct., 10 ,,		3	3
Classical Archæology (Honours Course)	16 Oct., 5[2] ,,	Prof. Baldwin Brown	3	3
English	15 Oct., 4 ,,	Prof. Masson	3	3
English Lit. (Honours Half Course)	8 Jan., 3 ,,	G. Gregory Smith, M.A.	2	2[3]
English Lang. (Honours Half Course)	21 Oct., 3 ,,		2	2[3]
French (Pass)[1]	15 Oct., 3 ,,	Charles Sarolea, Ph.D., D.Litt.	3	3
French (Honours)	16 Oct., 4 ,,		3	3
Italian[4]				

[1] Students who wish to take the Classes of Senior Latin, Senior Greek, French or German, as qualifying for Graduation in Arts, must have previously passed in Latin (Higher Standard), Greek (Higher Standard), French, or German respectively, either as part of their Preliminary Examination or in addition thereto.

[2] The hour may be altered to suit the class.

[3] The fee for two Half Courses in the same academic year is £3, 3s.

[4] Dr Sarolea is prepared to give a Course of Fifty Lectures on an Honours Standard. See page 90.

WINTER SESSION, 1895-96—*continued.*

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees. £	s.
I.—DEPARTMENT OF LANGUAGE AND LITERATURE—*continued.*				
German (Pass)[1]	15 Oct., 4 o'cl.	Otto Schlapp ...	3	3
German (Honours)	16 Oct., 3 ,,		3	3
Sanskrit (Junior Class)	16 Oct., 3 ,,	Prof. Eggeling	3	3
Do. (Senior Class)[2]	16 Oct., 4 ,,		3	3
Hebrew (Junior Class)	29 Oct., 1 ,,		3	3
Do. (Senior Class)[2]	29 Oct., 2 ,,		3	3
Arabic[2] (*Mon., Wed., & Fri.*)	1 Nov., 3 ,,	Prof. Kennedy..	3	3
Syriac[2] (*Tues. & Thurs.*)	29 Oct., 3 ,,		2	2
Celtic[2]	15 Oct., 4 ,,	Prof. Mackinnon..	2	2[3]
Do. Advanced	21 Oct., 3 ,,		1	1
Gaelic Class	22 Oct., 3 ,,		1	1
II.—DEPARTMENT OF MENTAL PHILOSOPHY.				
Logic & Psychology	15 Oct., 1 o'cl.	Prof. Seth	3	3
Metaphysics and Hist. of Philosophy (Honours Class)	21 Oct., 3 ,,		2	2[4]
Moral Philosophy	15 Oct., 2 ,,	Pro. Calderwood	3	3
Do. Honours Class	23 Oct., 3 ,,		2	2[4]
Political Economy[5]	15 Oct., 5 ,,	Prof. Nicholson...	3	3
Education (Theory, History, & Art of)	16 Oct., 3.10 ,,	Prof. Laurie.....	3	3
Philosophy of Law[6] (45 *Class Meetings*)	15 Oct., 2 ,,	Prof. Sir Ludovic Grant, Bart...	2	2
Natural Theology (Gifford Lectureship)	Dates will be afterwards announced.	Emeritus-Prof. Campbell Fraser	Free.	
III.—DEPARTMENT OF SCIENCE.				
Junior Mathematics	15 Oct., 12 o'cl.	Prof. Chrystal...	3	3
Senior Mathematics[7]	15 Oct., 9 ,,		3	3
Mathematics, Intermediate Honours..	16 Oct., 11 ,, (*Mon., Wed., Fri.*)		3	3

[1] See footnote 1, page 73.

[2] Students who wish to take the Classes of Sanskrit, Hebrew, Arabic, Syriac, or Celtic as qualifying for the M.A. Degree, must have previously passed an Examination in these Languages equivalent in standard to the Examinations in Latin and Greek in the Preliminary Examination.

[3] For Lectures only, £1, 1s.; when taken as a Graduation Course, £3, 3s.

[4] When taken as a Graduation Course, £3, 3s.

[5] This Course up to Christmas qualifies in Economics for the B.Sc. in Agriculture.

[6] Half-Course.

[7] Students who wish to take the Classes of Senior Mathematics or Natural Philosophy as qualifying for Graduation in Arts, must have previously passed the Intermediate or Higher Standard Examination in Mathematics either as part of their Preliminary Examination or in addition thereto.

WINTER SESSION, 1895-96—*continued.*

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.
III.—DEPARTMENT OF SCIENCE—*continued.*			
Mathematics (Advanced Honours)	16 Oct., 10 o'cl. (*Mon.*, *Wed.*, *Fri.*)	Prof. Chrystal.....	3 3
Natural Philosophy[1]..	15 Oct., 11 ,,	Prof. Tait.....	3 3
Do. (Advanced Honours, *Mon.*, *Wed.*, *Fri.*).....	23 Oct., 12 ,,		3 3
Physical Laboratory..	16 Oct., 10 ,,		2 2
Natural Philosophy (Intermediate Honours, *Mon.*, *Wed.*, *Fri.*)	16 Oct., 9 ,,	Cargill G. Knott, D.Sc.	3 3
Dynamics, Advanced Science (*Mon.*, *Wed.*, *Fri.*).....	16 Oct., 10 ,,		3 3
Astronomy (*Mon.*, *Tues.*, *Wed.*, *Thurs.*)	22 Oct., 11 ,,	Prof. Copeland ..	3 3
Chemistry, with Practical Chemistry	15 Oct., 10 ,, and 2 Dec., 11 & 2 ,,	Prof. Crum Brown	4 4 3 3
Zoology[2] (Elementary)	15 Oct., 12 ,,	Prof. Ewart....	4 4
Practical Zoology (Elementary).....	15 Oct., 11 ,,		2 2[3]
Advanced Zoological Laboratory.....	... ...		
Morphology of Vertebrates	16 Oct., 2 ,,	J. Beard, D.Sc...	3 3
Botany (Advanced)	15 Oct., 11 ,,	Prof. Balfour..	2 2[4]
Practical Botany (Advanced)	15 Oct., 11 ,,		3 3[3]
Geology.....	15 Oct., 4 ,,	Prof. Geikie.....	4 4

[1] See footnote 7, page 74.

[2] With Practical Zoology, a full Course, but the whole Course must extend over at least 75 separate days. Any student whose attendance on the Elementary Course of Lectures and the Elementary Practical Class of Botany or Zoology does not entitle him to a full Certificate for Graduation in Arts, may make up the seventy-five attendances required on separate days, by attending twenty-five Lectures of any other Course in the Botanical or Zoological Department as the case may be, without additional fee.

[3] Besides charge of 10s. for Laboratory Expenses.

[4] Besides Garden fee of 5s.

WINTER SESSION, 1895-96—*continued.*

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees. £	s.
IV.—DEPARTMENT OF HISTORY AND LAW.				
History (Honours Course on Wycliffe)	15 Oct., 4 o'cl.	Prof. Kirkpatrick.....	3	3
History (British, especially before 1509)	15 Oct., 12 ,,	Prof. Prothero	3	3
History (Honours Course on "England and Europe")	16 Oct., 10 ,,	Prof. Prothero	3	3
Constitutional Law and History[1].....	15 Oct., 5 ,,	Prof. Kirkpatrick	4	4
Roman Law.....	15 Oct., 4 ,,	Prof. Mackintosh....	4	4[2,3]
History of Roman Law (44 *Class Meetings*).....	... ...	Prof. Mackintosh....	2	2
Ecclesiastical History.	29 Oct., 11 ,,	Prof. Taylor.....	3	3
Archæology and Art (History of).....	15 Oct., 3 ,,	Prof. Baldwin Brown	3	3
Classical Archæology (Honours Course, *Mon., Wed., Fri.*)	16 Oct., 5 ,,	Prof. Baldwin Brown	3	3
Public International Law (45 *Class Meetings*)[4].....	7 Jan., 2 ,,	Prof. Sir Ludovic Grant, Bart.	2	2

SUMMER SESSION, 1896.

The Classes will be opened as follows, and will be closed on Friday, 17th July.

Classes.	Days and Hours.	Profs. and Lecturers.	Class Fees. £	s.
1. DEPARTMENT OF LANGUAGE AND LITERATURE.				
Senior Latin (Graduation Half-Course)[5]	5 May, 9 o'cl.	F. R. Jamieson, M.A.	2	2
Honours Latin (Graduation Half-Course)	5 May, 10 ,,	F. R. Jamieson, M.A.	2	2
Senior Greek (Graduation Half-Course)[5]..	5 May, 10 ,,	A. Douglas Thomson, M.A.	2	2
Honours Greek (Graduation Half-Course)	5 May, 9 ,,	A. Douglas Thomson, M.A.	2	2

[1] Full Course, qualifying both for Arts and for Law Graduation, in two distinct Half-Courses.
[2] Fee for Winter Session.
[3] Fee for both Winter and Summer, £5, 5s.
[4] Half-Course.
[5] See footnote 1, page 73.

SUMMER SESSION, 1896—*continued.*

Classes.	Days and Hours.	Profs. and Lecturers.	Class Fees.
			£ s. d.
1. DEPARTMENT OF LANGUAGE AND LITERATURE—*continued.*			
English Literature (Honours Graduation Half-Course, *Mon., Wed., & Fri.*)	5 May, 12 o'cl.	G. Gregory Smith, M.A.	2 2 0
Sanskrit	1 May, 3 ,,	Prof. Eggeling...	3 3 0
Elementary Hebrew[1] ...	5 May, 10 ,,	Prof. Kennedy and Assistant.	1 11 6
Elementary Arabic.....	5 May, 11 ,,		2 2 0
2. DEPARTMENT OF MENTAL PHILOSOPHY.			
Ancient Philosophy (Honours Graduation Half-Course, *Tues., Wed., & Fri.*)	5 May, 11 o'cl.	R. P. Hardie, M.A.	2 2
Ethics (Honours Graduation Half-Course, *Mon., Wed., Fri.*)...	6 May, 12 ,,	Charles Douglas, M.A., D.Sc.	2 2
Psychology (Honours Half-Course, *Tues. and Thurs.*)	5 May, 12 ,,		2 2
3. DEPARTMENT OF SCIENCE.			
Senior Mathematics (First Graduation Half-Course)[2].....	5 May, 11 o'cl.	Chas. Tweedie, M.A., B.Sc.	2 2
Senior Mathematics (Second Graduation Half-Course)[2].....	5 May, 12 ,,		2 2
Honours Mathematics (Graduation Half-Course)	5 May, 10 ,,		2 2
Physical Laboratory.....	5 May, 10 ,,	Prof. Tait and Assistant.	2 2
Physics (*mainly for Students of Medicine*)	5 May, 12 ,,	Prof. Tait.	3 3
Applied Mathematics (Electricity and Magnetism)	5 May, 9 ,,	C. G. Knott, D.Sc.	2 2

[1] To prepare Students for entering the Junior Class in Winter Session.
[2] See footnote 7, page 74.

SUMMER SESSION, 1896—*continued.*

Classes.	Days and Hours.	Profs. and Lecturers.	Class Fees. £	s.
3. DEPARTMENT OF SCIENCE—*continued.*				
Advanced Experimental Physics	5 May, 10 o'cl.	W. Peddie, D.Sc.	2	2
Practical Chemistry	5 May, 2 ,,	Professor Crum Brown.	3	3
Chemistry (Organic)	5 May, 1 ,,		2	2
Zoology (Elementary)[1]	5 May, 1 ,,	... ...	4	4
Do. (Elementary Practical)	5 May,[2]		2	2[3]
Do. of Invertebrata (Intermediate Course)	5 May, 3 ,,	Prof. Ewart		
Advanced Zoological Laboratory	5 May,[2]			
Invertebrate Morphology	5 May, 2 ,,	... ...		
Botany[4]	5 May, 8 ,,	Prof. Balfour	4	4[5]
Practical Botany				
Field Demonstrations on *Saturdays*.	5 May, 9 ,,		2	2[5]
Geology (*Mon.*, *Wed.*, *Fri.*)	6 May, 4 ,,	Prof. Geikie	3	3
Field Demonstrations *on Saturdays*				

TUTORIAL CLASSES.

Classes.	Days and Hours.	University Assistants.	Class Fees. £	s.
Junior Latin (Preliminary Class)	5 May, 12	Francis R. Jamieson, M.A., Lecturer on Latin Literature.	2	2
Junior Greek (Preliminary Class)	5 May, 11	A. Douglas Thomson, M.A., Lecturer on Greek Literature.	2	2
Natural Philosophy (Advanced Honours)	5 May, 9	William Peddie, D.Sc., Lecturer on Natural Philosophy.	2	2

[1] See footnote 2, page 75.
[2] At hours to be arranged.
[3] Besides charge of 10s. for Laboratory Expenses.
[4] With Practical Botany a full Course, but the whole Course must extend over 75 separate days. See footnote 2, p. 75.
[5] Besides Garden Fee of 5s.

The following means are afforded for Practical Instruction :—

LABORATORIES.

The Physical Laboratory, established with the view of affording Students a practical knowledge of the construction and use of physical apparatus, and the mode of conducting experimental inquiries, is open daily from 10 to 3, under the superintendence of Professor Tait.

The Royal Observatory is open to Students of Practical Astronomy on Friday evenings from 8 P.M.

The Chemical Laboratories [1] (distinct from the Practical Chemistry Room), completed in 1885, contain accommodation for forty Students. The Laboratories are fitted with all necessary apparatus for chemical analysis and research, open daily, under the superintendence of the Professor, assisted by Leonard Dobbin, Ph.D.; Hugh Marshall, D.Sc.; A. F. Watson, B.Sc.

Zoology Laboratories, for study of the structure and development of Invertebrate and Vertebrate forms, open daily, under the superintendence of the Professor, assisted by J. Beard, D.Sc.; Gregg Wilson, M.A., B.Sc., Ph.D.

The Royal Botanic Garden Laboratory, open daily, for the practical study of plants and for botanical research, under the superintendence of the Professor, assisted by J. A. Terras, B.Sc., and J. H. Burrage, B.A.

Geological and Petrological Laboratory, for practical instruction in the study of Minerals and Rocks, is open on Mondays, Wednesdays, and Fridays, from 2 to 4, under the superintendence of Professor Geikie.

MATRICULATION.

Students are required to take out their Matriculation Ticket and Class Tickets for each course of Lectures which they propose to attend, not later than fifteen days after the commencement of the course. Matriculation consists in paying during each year of study an entrance fee to the University, and in inscribing the name in the Students' Album.

The Matriculation Fees are :—

For the Academical Year, 1st October to 1st October, .	£1 1 0
For the Summer Session only, 1st May to 1st October, .	0 10 6

But Candidates who appear for Examination in July, or for Graduation in August, are required to pay the Matriculation fee of £1, 1s., unless previously matriculated for the whole year.

[1] Fees for Chemical Laboratory :—*Whole day*—Winter Session, £10, 10s., Oct.-Dec., Jan.-Mar.; or Summer Session, £5, 5s. *Half day*—Winter Session, £6, 6s., Oct.-Dec., Jan.-Mar.; or Summer Session, £3, 3s. Preference will be given to Students in the above order. Students who are not Matriculated may attend the Chemical Laboratory on payment of the Entrance Fee of 5s., in addition to the Laboratory Fee.

The Curriculum in Arts.[1]

—o—

COURSES OF LECTURES.

1895-1896.

I.—DEPARTMENT OF LANGUAGE AND LITERATURE.

HUMANITY—(Latin).

PROFESSOR

Junior Class—Will be taught by the Assistant, under the supervision of the Professor. 9 to 10 o'clock five days a week, and on Mondays and Wednesdays, 11 to 12.

The work of the Class consists of—

1. Readings of some Latin author, such as Virgil, Horace, Ovid, or Tibullus, Livy, Sallust, and Cicero;—

2. Lectures on Roman History or Literature;—

3. Exercises in Latin Prose Composition;—

4. Translation of passages from Latin into English, and from English into Latin "at sight."

5. Written Examinations.

Books recommended. — Bradley's Arnold's Latin Prose. Allen's Second Latin Exercise Book. Pelham's Outlines of Roman History. Wilkins' Primer of Roman Literature. Wilkins' Primer of Roman Antiquities.

During the Winter Session 1895-96 the following books will be read:—Livy, Bks. III. and XXIV.; Cicero, *Pro Murena;* Virgil, *Æneid*, Bk. V.; Horace, *Epistles*, Bk. I.; Sallust, *Catilina.*

Senior Class—10 to 11, five days a week.

This is the class which qualifies for the ordinary Degree of M.A.[2]

The work of the Class consists of—

1. Readings of some Latin author, such as Virgil, Horace, Cicero (*Letters* or *Speeches*), Tacitus;—

[1] The annual amount payable for Matriculation, Class Fees, &c., of the regular Course in Arts may be estimated at about £10, 10s.

[2] See footnote 1, page 73.

2. Lectures on Roman History or Literature ;—
3. Weekly Exercises in Latin Prose ;—
4. Written Examinations.

Books recommended.—The New Latin Primer (Postgate and Vince) ; Pott's Hints towards Latin Prose Composition ; elham's Outlines of Roman History ; Cape's Early Empire ; Cruttwell's History of Latin Literature ; Rich's Dictionary of Antiquities.

During the Winter Session 1895-96, the following books will be read :—Horace, *Satires*, II. ; Juvenal, I., III., IV., V., VII. ; Tacitus, *Annals*, Bk. IV. Subject for private reading, Cicero in *Catilinam*, I.-IV.

Third (Honours) Class—12 to 1.

The Third (Honours) Latin Class meets four days a week. It is intended to assist the studies of Candidates for University Scholarships and Graduation with Honours.

The work of the Class consists of—

1. Readings and explanations of some of the more difficult Latin authors, such as Tacitus, Lucretius, Plautus, Martial, &c.;—

2. Lectures on Roman History and Literature, chiefly in connection with the Books read in the Class ;—

3. Essays on questions arising out of the Lectures or Books read, and Exercises in Latin Prose Composition ;—

4. Written Examinations on the work done in the Class.

During the Winter Session 1895-96, the following books will be read :—Plautus, *Captivi ;* Pliny, *Letters* II., III. : Tacitus, *Annals*, parts of Bks. XII.-XV.

Summer Session, 1896.

FRANCIS R. JAMIESON, M.A., *Lecturer.*

Senior Class—9 to 10, five days a week.

This class qualifies as a half-course for Graduation.[1]

The work of the Class consists of—

1. The reading of the Latin authors prescribed for the Degree Examination in October 1896 and April 1897 ;—

[1] See footnote 1, page 73.

2. Lectures on Roman Literature, chiefly bearing on the authors read ;—

3. Lectures on Roman History, treating of the period prescribed for the Degree Examination ;—

4. Exercises in Latin Prose Composition ;—

5. Written Examinations on the work done in the Class ;—

6. Translation of passages from Latin into English, and from English into Latin "at sight."

The full Course may be completed either by attendance during another Summer Session or by attendance during half of a Winter Session.

Third (Honours) Class—10 to 11.

The Third (Honours) Latin Class in the Summer Session qualifies as a half-course for Graduation with Honours in Classics. The Class meets four days a week, and is intended to assist the studies of Candidates for University Scholarships, for Graduation with Honours, and for the Indian Civil Service.

The work of the Class consists of :—

1. Readings and explanations of some of the more difficult Latin authors, such as Tacitus, Lucretius, Plautus, Martial, &c. ;—

2. Lectures on Roman History and Literature, chiefly in connection with the Books read in the Class ;—

3. Essays on questions arising out of the Lectures or Books read, and exercises in Latin Prose Composition ;—

4. Written Examinations on work done in the Class, and on subjects prescribed for voluntary reading.

During the Summer Session of 1896, the books read will be selected from the programmes of work for Honours Graduation in April 1897 and April 1898.

Tutorial Class.

The Junior Class is intended to meet the wants of students who are preparing for the Preliminary Examination to be held in October next, and the work to be done will be selected with that end in view. Special attention is directed to Latin Prose Composition, one exercise being done with the Class daily, and two written exercises done and corrected in each week.

GREEK.

PROFESSOR BUTCHER.

Junior Class—Will be taught by the Assistant, under the supervision of the Professor. 10 to 11 o'clock, five days a week, and 11 to 12 on Tuesdays, Thursdays, and Fridays.

The work of the Class consists of—

1. Readings of some Greek author, as Xenophon, Lucian, Plato (an easy dialogue), Homer, Euripides, or Aristophanes (selections) ;—
2. Lectures on Greek History or Literature ;—
3. Exercises in Greek Prose Composition ;—
4. Translation of Unseen Passages ;—
5. Written Examinations.

Books recommended.—W. G. Rutherford's Greek Grammar, and First Greek Syntax ; F. E. Thompson's Elementary Greek Syntax ; Clyde's Greek Syntax ; Jebb's Primer of Greek Literature ; Peile's Primer of Philology ; Fyffe's Primer of Greek History ; Oman's History of Greece, or Cox's General History of Greece, or W. Smith's History of Greece.

Senior Class—11 to 12, five days a week.

This is the class which qualifies for the ordinary Degree of M.A.[1]

The work of the Class consists of—

1. Readings of some Greek author, such as Thucydides, Demosthenes, Herodotus, Plato ; Homer ; a play of Aeschylus, Sophocles, Euripides, or Aristophanes ;—
2. Lectures on Greek Literature, History, or Philosophy ;—
3. Greek Prose Composition, or Translation of an Unseen Passage once a week, and a Lecture on the passage when the exercises are returned ;—
4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading ;—
5. Greek Verse Composition (voluntary).

Books recommended.—W. G. Rutherford's Greek Grammar, and First Greek Syntax ; Goodwin's Greek Moods and

[1] See footnote 1, page 73.

Tenses ; Greek Syntax, by F. E. Thompson ; Sidgwick's Greek Prose Composition ; Jebb's Primer of Greek Literature ; Müller & Donaldson's History of Greek Literature ; Jevon's History of Greek Literature, or Mahaffy's History of Greek Literature ; Oman's History of Greece, or Cox's General History of Greece, or W. Smith's History of Greece ; Greek Verse Composition (Sidgwick and Morris) ; An Introduction to the Comparative Grammar of Greek and Latin, by King and Cookson.

During the Winter Session 1895-96, the following books will be read :—Homer, *Iliad*, XXII., XXIII. ; Plato, *Republic*, Bks. VI., VII.

The subject for private readings will be Sophocles, *Antigone*.

Third (Honours) Class—10 to 11.

The Third (Honours) Greek Class meets four days a week. It is intended to assist the studies of Candidates for University Scholarships and Graduation with Honours.

The work of the Class consists of—

1. Readings and explanations of some of the more difficult Greek authors, such as Thucydides, Demosthenes, Plato, Aristotle, Aeschylus, Pindar, &c. ;—

2. Lectures on Greek Literature, History, or Philosophy ;

3. Greek Composition and Translation of Unseen Passages ;

4. Occasional Critical Papers and Essays ;—

5. Written Examinations on the work done in Class.

During the Winter Session 1895-96, the chief work of the Class will be Aristotle, *Nic. Ethics*, I.-IV. and X.

Summer Session, 1896.

A. DOUGLAS THOMSON, M.A., *Lecturer*.

Senior Class—10 to 11, five days a week.

This Class qualifies as a half-course for Graduation.[1]

The work of the Class consists of—

1. The reading of the Greek authors prescribed for the Degree Examination in October 1896 and April 1897 ;—

2. Lectures on Greek History or Literature ;—

[1] See footnote 1, page 73.

3. Greek Prose Composition, and Translation of Unseen Passages ;—

4. Written Examinations.

The full Course may be completed either by attendance during another Summer Session or by attendance during half of a Winter Session.

Third (Honours) Class—9 to 10.

The Third (Honours) Greek Class meets four days a week. It is intended to assist the studies of Candidates for University Scholarships and Graduation with Honours.

The work of the Class consists of—

1. The reading of books selected from the programme of work for Graduation with Honours in 1897 and 1898 ;—

2. Lectures on Greek History or Literature ;—

3. Greek Prose Composition, and Translation of Unseen Passages ;—

4. Written Examinations.

This Class qualifies as a half-course for Graduation with Honours. The full Course may be completed either by attendance during another Summer Session or by attendance during half of a Winter Session.

Junior (Tutorial) Class—11 to 12, five days a week.

This Class is intended to meet the wants of Students who are preparing for the Preliminary Examination to be held in October next, and the work to be done will be selected with that end in view.

CLASSICAL ARCHÆOLOGY.

PROFESSOR BALDWIN BROWN.

Under the new Regulations Classical Archæology may be taken as one of the optional subjects for Honours in Classics.

An Honours Course of fifty lectures on this subject will be delivered in the Winter Session, 1895-6, in the Fine Art Class Rooms, on Mondays, Wednesdays, and Fridays, at 5 P.M.[1]

Additional Class-meetings of a tutorial character for the

[1] The Class hour may be changed if another hour is found more convenient.

assistance of students will be held as often as is found desirable, and at hours to be afterwards arranged.

The treatment of the subject will embrace—

1. A general survey of the field of study ;—

2. An examination of selected passages from ancient authors, bearing on the History of Classical Art ;—

3. A special study of one particular branch of the subject, the theme chosen for 1895-6 being the Types of Greek Coins, with special reference to their value as illustrating Greek Sculpture. (Other special subjects, such as the History of Greek Vase Painting, or Greek Tektonics, will be taken up in succeeding Sessions.)

The text-books will be—Overbeck's "Schriftquellen" (a collection of passages from ancient authors bearing on Classical Art) ; Murray's "Handbook of Greek Archæology" (London, John Murray) ; Murray's "History of Greek Sculpture," 2nd Ed. (London, John Murray) ; and, for the special subject, Gardner's "The Types of Greek Coins" (Cambridge, University Press).

The subject will be treated from the artistic standpoint, which is now more and more insisted on by writers on this branch of classical study. A high degree of accuracy and considerable acquaintance with the most important Greek and Latin authorities will be required of Candidates for Honours, but no previous special knowledge either of Art or of Archæology will be expected on the part of those joining the Class. The different branches of the subject, so far as time permits, will be opened up from the beginnings, and students will be assisted in the Tutorial Classes to obtain a proper understanding of technical terms, and an appreciation of the artistic points which will come up for discussion in the more formal Lectures. They will also have access at suitable times to the collection of illustrations referred to in the Lectures, and to the Class Library, which contains some of the standard works on the subject.

SANSKRIT AND COMPARATIVE PHILOLOGY.

PROFESSOR EGGELING.

For Honours Course, see under Sanskrit and Comparative Philology, pages 92, 93.

RHETORIC AND ENGLISH LITERATURE.

PROFESSOR MASSON.

The business of the Class will comprehend—

I. Till about Christmas, two parallel courses of Lectures: one on the Principles of English Style and Composition, with the relative portions of the Ancient Rhetoric; the other on the Literary History of the British Islands as far as to 1250, with special attention to the Anglo-Saxon Literature, and with a view of the History of the English Language from its Anglo-Saxon stage to the beginnings of the present English.

II. From about Christmas to the end of the Session, a Course of Lectures on the History of English and Scottish Literature from 1250 to the present time: divided into Periods thus:—(1.) From 1250 to 1400, ending with Chaucer, Langland, and Barbour; (2.) From 1400 to 1580, including the English Poets from Lydgate to Wyatt, Surrey, and Sackville, and the Scottish Poets from James I. to Dunbar, Gavin Douglas, and Lyndsay; (3.) From 1580 to 1625, called "The Elizabethan Period," and including Spenser, Bacon, Shakespeare, and their Contemporaries; (4.) From 1625 to 1688, or the Period of Milton and Dryden; (5.) From 1688 to 1789, or from Dryden to Cowper and Burns, called generally "The Eighteenth Century"; (6.) From 1789 to the present time, or from Wordsworth and Scott to Tennyson and Browning. Under each period there will be a synopsis of its principal poets and prose-authors; the lives and writings of the more important of these will be reviewed more at large; and the general aim will be to exhibit the successive movements and variations of our Language and Literature in their connections with the course of our National and Social History.

III. Instruction in English Composition, &c. During part of the Session one of the meetings in each week will be devoted to practical work of various kinds, including brief written exercises to be done by the Students in the Class-room. Subjects will also be prescribed for more extensive Essays to be written at home. There will be Prizes for merit in Essay-writing, in addition to the general Class-Prizes.

Text-Books and Books recommended. — Bain's "English Composition and Rhetoric"; Hodgson's "Errors in the Use of English"; Morley's "First Sketch of English Literature"; Chambers's "Cyclopædia of English Literature"; "Three Centuries of English Poetry"; Morris's "Historical Outlines of English Accidence"; Sweet's "Anglo-Saxon Reader."

Honours Courses.[1]

G. GREGORY SMITH, M.A., *Lecturer.*

A.—ENGLISH LITERATURE.

An Honours Half-Course of Twenty-five Lectures on Elizabethan Literature,—to be delivered during the Winter Session, after the Christmas Vacation.

The work of this Class (which will meet on Monday, Wednesday, and Friday from 3 to 4, beginning on Wednesday, 8th January) will be a study of special phases of Elizabethan Literature, with more particular attention to some of the books prescribed for the Examination for the Honours Degree.

B.—OLD AND MIDDLE ENGLISH.

An Honours Half-Course of Twenty-five Lectures on the History of Old and Middle English,—to be delivered during the Winter Session, before the Christmas Vacation.

The work of the Class (which will meet on Monday, Wednesday, and Friday from 3 to 4, beginning on Monday, 21st October) will consist of—

1. An Historical Outline of the Development of the English Language.

2. The Study of selected Texts, including some of the Texts prescribed for the Examination for the Honours Degree.

3. Old English Palæography.

Text-Books, in addition to those recommended for the Honours Degree.—Sweet's "Oldest English Texts" and "History of

[1] The "Honours Subjects" in English are (1) Literature, and (2) Language and British History, which together constitute the second Subject. Any two of the three Half-Courses are equivalent to a full Course for Graduation with Honours. The fee for each, if taken separately, is £2, 2s.; for two in the same Winter Session, £3, 3s.

English Sounds"; Oliphant's "Old and Middle English"; Ellis's "Early English Pronunciation"; J. A. H. Murray's "Dialects of Southern Scotland" (Historical Introduction); and Skeat's "Facsimiles of Old English Manuscripts."

Summer Session, 1896.

C.—ENGLISH LITERATURE.

An Honours Half-Course of Twenty-five Lectures on the Literature of the Seventeenth Century.

The work of the Class (which will meet on Monday, Wednesday, and Friday from 12 to 1) will be a study of certain phases of the Literature of the Period, with special reference to several of the books prescribed for the Examination for the Honours Degree.

FRENCH LANGUAGE AND LITERATURE AND ROMANCE PHILOLOGY.

CHARLES SAROLEA, Ph.D., Litt.D., *Lecturer.*

Ordinary Graduation Class—3 to 4, five times a week.

This is the class which qualifies for the Ordinary Degree of M.A.[1]

The work of the Class consists of—

1. Readings of some French author, such as Montaigne, Corneille, Racine, Molière, Boileau, Voltaire, Rousseau, and V. Hugo.

2. Lectures on French Literature or History.

3. French Prose Composition, or Translation of an unseen passage once a week, and a lecture on the passage when the exercises are returned.

4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

5. Lectures on the Philology and Historical Development of the French language.

Books to be read during the Winter Session 1895-96:—Victor Hugo, *Les Chatiments*, *L'Année terrible;* Musset, *Extraits;* Rousseau, *Extraits;* Thiers, *Extraits.*

[1] See footnote 1, page 73.

Honours Class—4 to 5.

The Honours French Class meets four days a week. It is intended to assist the studies of Candidates for University Scholarships and Graduation with Honours.

The work of the Class consists of—

1. Readings and explanations of Old French Texts, and of some of the more difficult Modern French authors.

2. Lectures on French Literature or History, and on Romance Philology.

3. French Composition and Translation of unseen passages.

4. Occasional critical papers and essays.

5. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

Books to be read during the Session 1895-96 :—V. Hugo, *La Légende des Siècles*, *Shakespeare*, *Les Contemplations;* Lanson, *Littérature Française;* Darmesteter, 16*e. siecle.*

Summer Session, 1896.

The arrangements for the Summer Session 1896 will be announced later.

ITALIAN LANGUAGE AND LITERATURE AND ITALIAN PHILOLOGY.

Course of Fifty Lectures on the Honours Standard.

CHARLES SAROLEA, PH.D., LITT.D., *Lecturer.*

The Honours Italian Class meets three days a week. The work of the Class consists of—

1. Readings and explanations of Italian Classics of the 14th and 16th century (with special regard to Dante), and of some of the more difficult modern Italian authors.

2. Lectures on Italian Literature and History, and on Italian Philology.

3. Occasional critical Papers and Essays.

4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.

Books to be read during the Session 1895-96 :—Dante.

"Divina Commedia," "De Monarchia"; Manzoni, "I promessi Sposi"; Leopardi, Prose; D'Ancona, "Manuale della Litteratura italiana."

Students who desire to attend this Course are requested to send their names to Dr Sarolea, Hasselt, Belgium, before 1st October.

GERMAN LANGUAGE AND LITERATURE AND TEUTONIC PHILOLOGY.

OTTO SCHLAPP, *Lecturer.*

Ordinary Graduation Class—4 to 5, five times a week.

This is the class which qualifies for the Ordinary Degree of M.A.[1]

The work of the Class consists of—

1. Readings of some Middle High German Texts, and of such modern German authors as Lessing, Herder, Goethe, Schiller, Jean Paul F. Richter, Heine, Uhland, Gutzkow, and Freytag.
2. Lectures on German Literature or History.
3. German Prose Composition, or translation of an unseen passage, or a critical paper or German essay once a week, and a lecture on the papers when returned.
4. Written Examinations on the work done in the Class, and on subjects prescribed for voluntary reading.
5. Lectures on the Philology and Historical Development of the German Language.

Books recommended.—Weisse, *German Grammar;* Vietor, *German Pronunciation;* Duden, *Etymologie der Neuhochdeutschen Sprache;* Behagel, *Die Deutsche Sprache;* Koch, *Geschichte der Deutschen Litteratur* (Göschen); Roquette, *Geschichte der Deutschen Dichtung.*

During the Winter Session 1895-96 the following books will be read:—Lessing, *Minna von Barnhelm;* Schiller, *Braut von Messina;* Goethe, *Wahrheit und Dichtung.*

[1] See footnote 1, page 73.

Honours Class—3 to 4.

The Honours German Class meets four days a week.

It is intended to assist the studies of Candidates for University Scholarships and Graduation with Honours.

The work of the Class consists of—

1. Readings and explanations of Middle or Old High German Texts, and of some of the more difficult modern German authors.

2. Lectures on German Literature or History.

3. German Composition and Translation of unseen passages.

4. Occasional critical papers and German essays.

5. Written Examinations on the work done in Class, and on subjects prescribed for voluntary reading.

During the Session 1895-96 the following books will be read : — *Walther von der Vogelweide*, ed. Bartsch ; Goethe, *Iphigenie;* Schiller, *Wallenstein* (Pitt Press).

SANSKRIT AND COMPARATIVE PHILOLOGY.

PROFESSOR EGGELING.

A.—Sanskrit Language and Literature.

1. *Junior Class.*—Grammar and Exercises. Easy Sanskrit Texts (from Lanman's Reader). Easy translations from English into Sanskrit.

2. *Senior Class.*—Repetition of Grammar. Translations from English into Sanskrit. Sanskrit Texts, such as Kālidāsa's Raghuvanśa or Sakuntalā; Mricchakatikā; Manu's Institutes of Law ; selected Hymns of the Rigveda (Lanman's Reader).

The Senior Sanskrit Class will be the Graduating Class in Sanskrit for the Ordinary Degree of Master of Arts ; and any student who desires to attend this Class with a view to Graduation in Arts must previously pass an examination in accordance with Sect. IV., subs. 3 of the Ordinance.

The examination will include plain passages for translation from and into Sanskrit, and grammatical questions.

Those who propose, in a subsequent session, to take up Sanskrit as one of their graduation subjects will have an

opportunity of attending the Junior Class in that language during the Session 1895-96.

B.—Comparative Philology.

During the Session 1895-96, the Professor will be prepared to deliver a course of Fifty Lectures on the Principles of Indo-European Philology and the history of Linguistic Studies, provided that a sufficient number of Students give in their names for this course. This course will qualify as one of the optional Honours Classes in connection with Classical Honours.

HEBREW AND SEMITIC LANGUAGES.

PROFESSOR KENNEDY.

See Courses under Faculty of Divinity.

CELTIC.

PROFESSOR MACKINNON.

Celtic Class—The class meets daily, at 4 P.M.

1. Monday and Wednesday, Lecture on Celtic Literature and Philology. In Session 1895-96 the subject of lecture will be :—Modern Period of Gaelic Literature,—the Literature of Ireland and the Isle of Man in outline,—the Literature of the Scottish Highlands in detail : Gaelic Grammar.
2. Tuesday, Thursday, and Friday, Reading and Exposition, mainly of old Gaelic authors. Translation from English into Modern and Old Gaelic.

Text-Books.—Extracts for Reading, Part II. ; Keating's Three Shafts of Death ; Windisch's Irische Texte mit Wörterbuch ; Stewart's, O'Donovan's, and Windisch's Grammars.

Any student who desires to attend this Class with a view to Graduation in Arts must previously pass an examination in accordance with Sect. IV., subs. 3 of the Ordinance.

The examination will be in Scottish Gaelic, or Irish Gaelic, or Welsh ; and will include translations from and into English, with grammatical, literary, and easy philological questions.

The fee in the case of a Student who attends with a view to graduation is £3, 3s.

An Advanced Class will meet during the Winter Session of 1895-96, on Monday and Friday, at 3 P.M. The Class will read and transcribe Old Gaelic Texts.

Fee, £1, 1s.

A Gaelic Class for the use of Junior students will meet during the Winter Session 1895-96, Tuesday, Wednesday, and Thursday, at 3 P.M. The Class will read on Tuesday and Thursday, Modern Scottish and Irish Gaelic, and commence the study of Old Gaelic ; Grammar and Exercises on Wednesday.

Text-Books.—Extracts for Reading, Parts I. and II. ; Stewart's and Joyce's Grammar ; Windisch's Grammar.

Fee for this class, £1, 1s.

II.—DEPARTMENT OF MENTAL PHILOSOPHY.

LOGIC AND METAPHYSICS.

PROFESSOR SETH.

Logic and Psychology—Junior Class—1 to 2.

The course in this class falls into three parts :—

(1) An outline of the main facts of Empirical Psychology, dealing more particularly with the facts and processes of cognition ; (2) The Elements of Logic, Deductive and Inductive ; (3) An introduction to the questions of philosophy, with special reference to the history of modern philosophy in England.

1. The Psychological Division of the course includes :—

The place of Psychology as a science, its scope and methods. The physiological mechanism and the relations of mind and organism : the senses, stimulus and sensation.

Analysis and classification of mental states. General conditions of consciousness. Attention : its nature, laws, and effects.

Perception : analysis of the elements involved. The perception of space and of objects in space ; the Berkeleian theory of vision.

Memory and Imagination. Distinction between percepts and images; illusions, hallucinations, the phenomena of sleep and dreams. Memory as retention. Memory as recognition. Theories of memory. Association and its laws. The productive imagination.

Intellect. Distinction between images and concepts. Nominalism and Conceptualism. The formation of the concept; thought and language.

The psychology of the Feelings and the Will in outline.

No text-book is prescribed for this part of the course, but frequent reference will be made to the leading works on the subject, and a manual such as Sully's "Outlines," Höffding's "Outlines," James's "Text-book," Baldwin's "Elements," or Dewey's "Psychology," may be usefully read in connection with the class lectures.

2. In the Logical division of the course Jevons's "Elementary Lessons in Logic" will be used to supplement the lectures, and references will be made to Keynes's "Formal Logic" and Mill's "Logic." The subjects treated will include :—

Definitions and Scope of Logic. The Laws of Thought.

Deductive Logic: Notions, Judgments, and Inferences. Exercises in Immediate Inference and in Syllogism. Definition and Division. Fallacies.

Theories of the Judgment and of the ultimate nature of Reasoning.

The relation of Deduction and Induction. The foundations of inductive reasoning: the uniformity of nature and universal causation. Observation and Experiment. The inductive methods. The function of hypothesis. Analogy. Probability.

3. The lectures under this head will deal with :—

The transition from mediæval to modern times and the beginnings of modern thought; Bacon as the spokesman of the new age and the pioneer of scientific method; Descartes as the founder of modern philosophy; the problem of Knowledge in Locke, Berkeley, and Hume.

Professor Fraser's "Selections from Berkeley" and certain chapters of Locke's "Essay" and Hume's "Enquiry" will be used in connection with the lectures as an introduction to the study of modern philosophy.

Metaphysics and History of Philosophy—Honours Class—3 to 4.

This Class is intended for those who have already attended the ordinary course, or who have otherwise some acquaintance with philosophy. The lectures deal in a more advanced way with the chief systems of modern philosophy, special attention being devoted to Spinoza and Kant. Guidance is also given in the study of Advanced Logic and Psychology.

Lectures on Greek Philosophy are also delivered as a part of this Course by Mr Hardie, Assistant to the Professor and Lecturer in Logic and Metaphysics.

The Class constitutes an Honours Course of Fifty Lectures, meeting on Monday and Thursday throughout the Session, and during a part of the Session at a separate hour for the Lectures on Greek Philosophy.

The "Bruce of Grangehill and Falkland Prize" is offered annually for competition. (*See* UNIVERSITY PRIZES.)

Summer Session, 1896.

R. P. HARDIE, M.A., *Lecturer*.

Honours Course in Ancient Philosophy.

This Class, which will constitute a half-course, qualifying for Honours in Mental Philosophy and in Classics, will meet at eleven o'clock on Tuesdays, Wednesdays, and Fridays, beginning on May 5.

Subject.—Outlines of the Philosophy of Plato; and the Philosophy of Aristotle, chiefly in its psychological and ethical aspects.

Books.—Plato, *Philebus*, Aristotle, *De Anima* and *Nicom. Ethics*, Bks. I.-IV. and X.

MORAL PHILOSOPHY.

PROFESSOR CALDERWOOD.

Ordinary Class.

The following are the subjects embraced in the course of Moral Philosophy :—

INTRODUCTION.—Province and Aim of Moral Philosophy.

1. PSYCHOLOGY OF ETHICS.—Knowledge of Moral Distinctions ; form and source of this knowledge ; Rival Theories — (*a.*) Intuitional Theory ; (*b.*) Evolution Theories, — Biologic (Spencer), Utilitarian (Mill) ; Dialectic (Hegel). Impulses to Action ; Restraints upon Action. The Will—its Nature and Laws of Exercise. Libertarian and Deterministic Theories. Moral Sentiments. Disorder of Moral Nature.

2. METAPHYSIC OF ETHICS.—The Being of God ; His Moral Government. The Foundation of Virtue ; the Relation of Divine Sovereignty to Free-Will ; the Relation of Human Desire to Divine Sovereignty ; the Origin of Evil ; the Immortality of the Soul.

3. APPLIED ETHICS.—Man's Position in the World ; Guidance of the Individual ; Formation of Moral Character ; Organisation of Society ; Sociology ; Natural Religion.

4. THE HISTORY OF MORAL PHILOSOPHY.—The Rise of Philosophy ; Distinction of Moral from Intellectual Philosophy ; Development of Systems of Moral Philosophy in Ancient and Modern Times.

The Course includes lectures, oral and written examinations, and essays.

Text-Books.—The Professor's "Handbook of Moral Philosophy ;" Kant's "Groundwork of the Metaphysic of Ethics ;" Sidgwick's "Outlines of the History of Ethics."

Books recommended for reference.—Price's "Principal Questions in Morals," Butler's "Sermons on Human Nature," Reid's "Active Powers," Mill's "Utilitarianism," Herbert Spencer's "Data of Ethics," Wallace's "Logic of Hegel," Hegel's

"Philosophy of the State," Green's "Prolegomena of Ethics," Sidgwick's "Methods of Ethics," Calderwood's "Vocabulary of Philosophy," Ueberweg's "History of Philosophy."

Honours Class—3 to 4 on Wednesday and Friday.

The History of Moral Philosophy from the time of Socrates.

Subjects of study.—The Sophists, The Teaching of Socrates as presented in Xenophon's "Memorabilia," and in Plato's "Protagoras" and "Apologia." The Ideal Philosophy of Plato as developed in the "Republic," and in other Dialogues. Aristotle's "Nicom. Ethics." The rise of Modern Philosophy; the "Method and Meditations" of Des Cartes; Spinoza's "Ethics." The Scepticism of Hume, and the fresh start of Philosophy subsequently. The Scottish Philosophy; Kant's Ethical System; Fichte's Practical Philosophy; Hegel's Ethics; Schopenhauer's Pessimism, in its Ethical Aspects; Later developments of the Ethics of Evolution.

Books recommended.—Zeller's "Socrates and the Socratic Schools," Plato's "Republic," Jowett's Translation, Sir Alexander Grant's "Ethics of Aristotle," Zeller's "Stoics, Epicureans, and Sceptics"; Kant's "Ethics," Semple's or Abbott's Translation, Hegel's Ethics in Morris's "Hegel's Philosophy of the State and of History" (Grigg's Philosophical Classics); Green's "Prolegomena to Ethics"; Utilitarianism, as presented in Mill's "Utilitarianism"; in Spencer's "Data of Ethics" and "Justice"; and in Sidgwick's "Methods of Ethics."

The Elizabeth Hamilton Prizes of Five Pounds will be awarded to the most distinguished of the Women Students in the Class.

Summer Session, 1896.

CHARLES DOUGLAS, M.A., D.Sc., *Lecturer.*

Honours Course in Psychology.

This Class, which will constitute a half-course qualifying for Honours in Mental Philosophy, will meet at twelve o'clock on Tuesdays and Thursdays, beginning on 5th May.

Attention will mainly be directed to such principles and problems as are of ethical and philosophical interest; results of experimental research will be specially kept in view.

No text-book will be followed, but frequent references will be given to James' "Principles of Psychology," Baldwin's "Hand-book of Psychology," Sully's "Human Mind," and other books.

Honours Course in Ethics.

This Class, which will constitute a half-course qualifying for Honours in Mental Philosophy, will meet at twelve o'clock on Mondays, Wednesdays, and Fridays, beginning on 6th May.

The course is intended mainly for students who propose to take Honours Classes in the following winter. The subject will be the recent development of English Ethics; and the lectures will discuss chiefly the books set for the Honours Examination: Green's "Prolegomena to Ethics," Sidgwick's "Methods of Ethics," and Spencer's "Data of Ethics."

COMMERCIAL AND POLITICAL ECONOMY AND MERCANTILE LAW.

PROFESSOR NICHOLSON.

The course, extending to 100 meetings of the Class, qualifies for Graduation in Arts.

The Lectures will follow the order of arrangement of John Stuart Mill's *Principles of Political Economy*.

1. METHODS USED IN ECONOMIC SCIENCE.—Analysis of Fundamental Conceptions, Wealth, Capital, &c.

2. PRODUCTION OF WEALTH.—Division of Labour—Accumulation of Capital—Growth of Population.

3. DISTRIBUTION OF WEALTH.—Socialism—Land Tenure—Wages—Profits—Rent—Trade Unions.

4. VALUE.—Money—Inflations and Depressions of Trade—Commercial Crises—Banking—Free Trade—Foreign Exchanges—Stock Exchange.

5. Economic Progress.—Effects of Progress on Value, and on the relative Distribution of Wealth.

6. Principles of the Limits of Government Interference with Industry.—Direct and Indirect Taxation—Incidence of Taxes—National Debts—Contracts—Joint Stock Companies—Patents—Copyrights.

Although Mill will be used as text-book, references will be constantly given to previous writers, *e.g.* Adam Smith and Ricardo, as well as to more recent writers, *e.g.* Sidgwick, Walker, Jevons, Marshall, Bagehot, &c.

History.—One lecture a-week will be devoted to the Economic History of England. This course is not intended to give the history of the Theory of Political Economy, but to trace the principal facts and institutions in the material and social life of the English people from an economic standpoint, *e.g.* Gilds, Feudal System, Land Tenures, Ecclesiastical Influence, Serfdom and the Poor, Forms and Amount of Wealth, Foreign and Internal Trade, &c.

THEORY, ART, AND HISTORY OF EDUCATION.

PROFESSOR S. S. LAURIE.

Theory, or Science, of Education.

A.—The End of Education.

The Possibilities and Limits of Education. The End of Education. The relation of the School to this End. The Educative Process generally, whereby the End is attained.

Materials or Subjects of Instruction conducive to the attainment of the End, and the carrying out of the Process. Definition of subjects in their school sense. Relative value of subjects for instruction and discipline respectively. Distinction of Real and Formal, Humanistic and Naturalistic.

Material conditions of the life and growth of Mind, i.e., *Physiology and its Educational Lessons.*

B.—Science of Education, *i.e.*

Applied Psychology and Ethics.—I. The Psychology of Intelligence in its educational relations fully treated. Periods of Mental Growth. Methodology or the Principles and Rules of the Art of Instruction which the Science yields.

II. Psychology of the Ethical Nature of Man in its educational relations. The Real of Morality (Instruction and Training); the Formal in Morality (Discipline to Duty).

C.—Art of Education.

I. *Intellectual.*

Rules of the Art, i.e. *Method in Intellectual Instruction, Training, and Discipline.*—Analytic exposition of the Rules, showing their derivation from the Science of education. Application of the Rules to teaching of—

(1.) Real-Naturalistic subjects, *e.g.* Object-lessons, Elementary Science, Geography, &c.

(2.) Real-Humanistic subjects, *e.g.* Language, Literature, Economics, History, &c.

(3.) Formal subjects, *e.g.* Arithmetic, Geometry, Grammar, Foreign Languages.

II. *Ethical.*

Rules of the Art, i.e. *Method in Moral Training and Discipline.*—Motives. The Authority of the Teacher. The meaning of Authority. The nature and conditions of its exercise. Punishments, Rewards, &c., &c.

The Organisation of a School. Organisation of a State-system. The ideas governing Primary, Secondary, and University Instruction respectively. The Manual and the Technical in Instruction. School appliances. The Manipulation of a Class. The Teacher.

D.—History of Education and of Theories.

Pre-Christian Education — 1. Education in Ancient Egypt. 2. Education among the Semitic Races. 3. Education of the Hindu Races. 4. The Education of the Ancient Persians. 5. Education among the Hellenic Races. The educational views of Plato and Aristotle. 6. Education among the Romans. 7. Detailed analysis and exposition of the Institutions of Quintilian. 8. Plutarch.

Christian Education—1. The decay of the Romano-Hellenic, and the rise of Christian, Education. 2. The Cathedral and Monastery Schools. 3. The Rise of Universities.

The Renaissance—1. Humanism as represented by Rabelais and Montaigne, Erasmus, Colet, Luther, Melancthon, John Sturm, and Roger Ascham. Exposition of "The Schole-master."

The Modern Movement — 1. Lord Bacon. 2. Ratichius. 3. Comenius. 4. Milton. 5. Analysis and exposition of John Locke's "Thoughts on Education," and the "Conduct of the Human Understanding." 6. Rousseau, Basedow, and Campe. 7. Pestalozzi, Jacotot, Fröbel, Jean Paul Richter, Diesterweg, Dr Arnold. 8. Dr Andrew Bell and Joseph Lancaster. 9. Herbert Spencer and contemporary Realism.

Note.—The books to be thoroughly studied during the Session, apart from the Lectures, are *Comenius' Didactic*, and the Professor's book on "Language and Linguistic Method." The "Institutes of Education" should also be in the hands of the student. *Four written Examinations will be held during the Session, and Three Essays on educational principles or method called for.*

Practice in Teaching.—Arrangements are made at the Training Colleges for securing training in the *Practice of Teaching* to the extent of the requirements of Government and of the University Schoolmaster's Diploma. Fee for this, £1, 10s. 6d. Facilities are also given for visiting one or two of the principal schools, and acquiring a knowledge of their organization.

PHILOSOPHY OF LAW.

PROFESSOR SIR LUDOVIC GRANT, BART.

A course of forty lectures on the Philosophy of Law will be delivered from the Chair of Public Law, commencing on Tuesday, 15th October 1895, at two o'clock, which will qualify as a half-course for graduation. The Class will meet five days a week. The course will be divided into two parts :—

(1.) The Science of Natural Law.

Scope of the Science defined. The State, its Functions and Legal Institutions, Marriage, Family, Property, Succession, Contract, Punishment, &c., examined and explained. The Lectures will include an historical review of the chief political and legal theories, ancient and modern.

Books of reference.—Ritchie, Natural Rights; Green, Principles of Political Obligation; Lorimer, Institutes of Law; Ahrens, Cour de Droit Naturel; Lerminier, Philosophie de Droit; Bluntschli, The Theory of the State.

(2.) The Science of Positive Law.

The Province of Jurisprudence determined. Examination of the Sources of Positive Law. Classification of Rights.

Books of reference.—The Student's Austin; Holland, Jurisprudence. Sir Henry Maine's Works.

GIFFORD LECTURES ON NATURAL THEOLOGY.

Lecturer—Emeritus Professor CAMPBELL FRASER, Hon. D.C.L. (Oxford) and LL.D. (Glasgow and Edinburgh).

These Lectures were endowed by the late Adam Gifford, Senator of the College of Justice, "for promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term."

According to the Trust Deed, "the lecturers appointed shall be subjected to no test of any kind, and shall not be required to take any oath, or to emit or subscribe any declaration of belief, or to make any promise of any kind; they may be of any denomination whatever, or of no denomination

at all ; they may be of any religion or way of thinking, or, as is sometimes said, they may be of no religion ; or they may be so-called sceptics or agnostics or free-thinkers ;—provided only that the 'patrons' will use diligence to secure that they be able reverent men, true thinkers, sincere lovers of and earnest inquirers after truth. I wish the lecturers to treat their subjects as a strictly natural science, the greatest of all possible sciences, indeed, in one sense, the only science,—that of Infinite Being, without reference to or reliance upon any supposed special exceptional or so-called miraculous revelation. The lecturers shall be under no restraint whatever in their treatment of their theme. The lectures shall be public and popular, that is, open not only to students of the Universities, but to the whole community, without matriculation."

The arrangements for 1895-96 *will be announced before the opening of the Session.*

III.—DEPARTMENT OF SCIENCE.

MATHEMATICS.

PROFESSOR CHRYSTAL.

Junior Class—This Class is taught by the Assistant, under the supervision of the Professor. 12 to 1.

Plane Geometry equivalent to Euclid, Books i., ii., iii., iv., and vi. (*Syllabus of Plane Geometry*, prepared by the Association for the Improvement of Geometrical Teaching forms the text of the lectures); Solid Geometry, equivalent to Euclid, Book xi.; Modern Geometry ; and Elementary Algebra.

Senior Class—9 to 10.

This class is the qualifying class for the Ordinary Degree of M.A. and for the First Science Examination.[1]

Algebra, including the elements of the Theory of Equations,

[1] See footnote 7, page 74.

and of Determinants, the Theory of Limits and the Elements of Curve Tracing; Plane Trigonometry; Conic Sections, treated geometrically and analytically; Modern Geometry.

Intermediate Honours Class—Monday, Wednesday, Friday, 11 to 12.

The work of this course will be suitable for Engineers and other Science Students who do not wish to make a specialty of Pure Mathematics.

The elementary parts of the Differential and Integral Calculus, and of the Calculus of Finite Differences. Analytical Geometry, Plane, and Elementary Solid. It is assumed that the Student has acquired a knowledge of the Theory of Equations, and of the elements of the Theory of Determinants before he joins this Class.

Advanced Honours Class—Monday, Wednesday, Friday, 10 to 11.

The subjects of the Advanced Course are the higher parts of the Differential and Integral Calculus; Differential Equations; Definite Integrals with special reference to Fourier's Theorem; Functions of Laplace and Bessel; Higher Plane Curves; Analytical Geometry of Three Dimensions.

Additional lectures on Quaternions, Projective Geometry, and other special subjects are given occasionally.

Tutorial Classes.—In addition to the ordinary class lectures occasional lectures are given by the Class Assistant. The time is devoted to the repetition of parts of the class lectures and to the working of examples.

Home Exercises are prescribed weekly in all the classes.

Written Examinations on the class lectures are held during the Session. The class honours are determined solely by these examinations.

Text-Books.—As a rule *special* text-books are not prescribed;

but the student is recommended to select from the following list :—

Geometry.—Wilson's Elementary Geometry, or the Text-Books of the Society for the Improvement of Geometrical Teaching, and one or more of the following, for the sake of the exercises they contain:—Mackay's, Todhunter's, Nixon's, or Casey's edition of Euclid's Elements, and Casey's Sequel to Euclid.*[1]

Algebra.—Chrystal, or Todhunter, Gross, Chambers's Mathematical Tables.

Solid Geometry and Conic Sections.—Taylor (smaller work) or Taylor* (larger work).

Trigonometry.—Todhunter, Walmsley, or Lock (M'Lelland and Preston* for Spherical Trigonometry).

Analytical Geometry.—Smith's Analytical Conic Sections ; and Dyer's Exercises in Analytical Geometry. Students intending to take the Third Class are recommended to get Salmon's Conic Sections, Salmon's Higher Plane Curves,* and Salmon's Geometry of Three Dimensions,* or, instead of the last, Smith's Solid Geometry.

Projective Geometry.—Cremona's Elements of Projective Geometry translated by Leudesdorf, or Henrici's Article on *Geometry*, "Encyclopædia Britannica" (9th edition).

Higher Algebra and Theory of Equations, etc.—Burnside and Panton's, or Todhunter's Theory of Equations ; Thomson's Introduction to Determinants, and Muir* or Scott* ; and Salmon's Higher Algebra for those who mean to read for Mathematical Honours.

Differential and Integral Calculus.—Williamson's Treatises, Forsyth's Differential Equations,* Frost's Curve Tracing, Boole's Finite Differences.*

[1] Works marked with asterisks are recommended to those only who make Mathematics a specialty.

Summer Session, 1896.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

1. *Lower Senior*—11 to 12.

This Class qualifies for Graduation in Arts and Science as a First Half-Course[1][2] in Mathematics. The work consists of Algebra and Plane Trigonometry, corresponding to the First Half of the Winter Graduation Course.

2. *Higher Senior*—12 to 1.

This Class qualifies for Graduation as a Second Half-Course[1][2] if taken *after any* First Half-Course in Mathematics.

Suitable also for Students reading for the more advanced part of the Winter Graduation Course.

The work consists of Algebra and the elementary treatment of the Conic Sections, Geometrical and Analytical.

In each Class weekly exercises are prescribed, and two written examinations are held.

3. *Advanced Class*—10 to 11.

This Class qualifies as a First Half-Course for Graduation in Arts and Science, with Honours in Mathematics and Natural Philosophy.

It will also, so far as is expedient, be adapted for the requirements of Engineering Students.

The Class work will aim at a working acquaintance with the more elementary parts of Determinants and the Theory of Equations (which are not treated in the Winter Advanced Courses), Differential and Integral Calculus, Finite Differences, and Analytical Geometry.

Tutorial Classes.

The above Classes also serve for Tutorial Classes.

[1] Attendance on the first half of the Winter Graduation Course up to Christmas can now be made to qualify as a First Half-Course in Mathematics, and attendance on the second half of the Winter Course from Christmas to the end of the Session as a Second Half-Course. *Any* First Half-Course, along with *any* Second Half-Course, taken subsequently, qualifies as a full Course of Instruction for Graduation.

[2] See footnote 7, page 74.

The Junior Class of Mathematics will not be continued in the Summer unless a strong demand for it be made.

Weekly exercises are prescribed on the work done in each class.

For text-books, see page 106.

NATURAL PHILOSOPHY.

PROFESSOR TAIT.

Ordinary Class.

(Qualifying for Ordinary M.A. and for First Science Examination.)[1]

The subjects embraced in the Course of Natural Philosophy are the following :—

1. Properties of Matter—including Inertia, Gravitation, Molecular Forces, &c.
2. Abstract Dynamics—including Kinematics, Statics and Kinetics of Solid, Liquid, and Gaseous Bodies, with their applications.
3. Sound, and Wave-propagation in general.
4. Heat (including Thermo-Dynamics).
5. Light (Geometrical and Physical Optics, and Radiation generally).
6. Electricity.
7. Conservation of Energy.
8. Astronomy (Descriptive and Physical).
9. Meteorology.

Properties of Matter, Abstract Dynamics, and Conservation of Energy, together with two or three others of the above divisions of the subject, are treated in detail every Session, the remainder being necessarily discussed in a more superficial manner, as it is impossible to enter at length into all in the course of a single Session.

It is intended that in Session 1895-96, in addition to Sections

[1] See footnote 7, page 74.

1, 2, and 7, Sections 4 and 6 shall form the more detailed part of the Course.

The whole Class is examined at intervals during the Session upon the subjects already treated in the Lectures; and a prize is given for the best answering. In these examinations, which are to be regarded as an essential part of the class-work, no Mathematics are requisite, except the most elementary portions of Arithmetic, Algebra, and Geometry.

In the months of January and March there are special Examinations upon prescribed subjects, applying mainly to those students who are competing for Class Prizes; and, on these two occasions only, the Class is divided into two parts—the division depending mainly upon the students' proficiency in Mathematics. In the Lower Division, the elements of Algebra and Geometry alone are required; in the Higher Division, Algebra, Geometry, and the Geometry of the Conic Sections are necessary.

The Prizes in each division of the Class are determined by adding the marks obtained in the two sets of Examinations above described. No student who has obtained a Prize in either Division of the Class can be allowed to compete, in a subsequent Session, for a Prize in the same or in a lower Division.

The Text-Book for the Dynamical part of the Course will be Thomson and Tait's "Elements of Natural Philosophy" (Pitt Press, Cambridge). Of this, however, only the more elementary portions will be required for the Lower Division. For the remainder of the subject the student may consult some of the following books: — Clerk-Maxwell's "Matter and Motion," Jenkin's "Electricity," Balfour Stewart's "Lessons in Physics," Tait's "Properties of Matter," "Heat," and "Light."

The special Examinations in January 1896 will be on the following subjects:—

Higher Division.

Newton's "Three Sections" (Goodwin's "Course of Mathematics," Frost's "Newton," or any good edition of the *Principia*).

Lower Division.

Herschel's "Astronomy," the smaller work, in one of the recent editions, omitting the chapter on Perturbations. A series of explanatory lectures will be given by the Class-Assistant before this Examination.

The subjects for the March Examinations in both Divisions will be Kinematics and Dynamics. The range will depend upon the progress which the Class has made in these subjects.

Subject of Voluntary Essay to be given in before the last week of the Session :—"The most probable estimate of the number of particles in a cubic inch of air at 0° C. and 1 atm., giving reasons for the selection made."

Honours Classes.

(For the benefit of Engineering and Science Students, and of Arts Students wishing to Graduate with Honours in the Department of Mathematics.)

For the Programme of the Advanced Science Class, see Courses in Science.

The Intermediate Course of at least Fifty Lectures will be given by the Lecturer on Applied Mathematics. It will include the more elementary parts of Dynamics of Particles, Rigid Solids, and Flexible Strings ; the Theory of the Potential ; and Conduction of Heat.

In the Advanced Course the subjects commenced in the Intermediate Course will be further developed, and some one or more special branches of Applied Mathematics [such as the Kinetic Theory of Gases, the Lunar Theory, the Undulatory Theory, Vortex Motion, &c.] will be fully treated.

One of the text-books in each of these Courses is *Dynamics*, a reprint of the article *Mechanics*, in the last edition of the "Encyc. Brit."

SUMMER CLASS OF PHYSICS, SPECIALLY FOR MEDICAL STUDENTS.

For particulars, see Courses in Faculty of Medicine.

PHYSICAL LABORATORY.

This has been established with the view of affording students a practical knowledge of the construction of, and manner of using physical apparatus, and with the mode of conducting experimental inquiries. The Laboratory is open for five or six hours daily during the Winter and Summer Sessions, under the personal superintendence of the Professor and his Class-Assistant. Fee, £6, 6s. for the Winter Session. It is hoped that, with the valuable collection of apparatus in the Museum, results of real use to science may be obtained.

A practical class, for the instruction of beginners in the elementary processes of measuring Time, Mass, Length, Angle, Force, &c., will be formed in the Winter and also in the Summer Sessions. The Course, in each case, will extend over about three months. The fee is £2, 2s. The Professor reserves to himself the right of admitting *free*, to general Laboratory work, such matriculated students of the practical class as may show special diligence and aptitude.

APPLIED MATHEMATICS.

(*Electricity and Magnetism.*)

C. G. KNOTT, D.Sc., *Lecturer.*

A Course of Lectures on the Theory of Electricity and Magnetism will be given during the Summer Session of 1896.

Fee, £2, 2s.

The following subjects will be treated more or less fully :— Electric Field, Potential, Induction, and Distribution of Charge ; Flow of Electricity in Networks, Sheets, and other conductors ; Thermal Relations, reversible and irreversible ; Magnetic and Electromagnetic Field and Potential ; Induced Magnetism ; Induced Currents and Electrical Oscillations.

A knowledge of Dynamics will be assumed, and the ordinary processes of the Differential Calculus will be used. The recent issue of Professor Chrystal's Articles on *Electricity* and *Magnetism* ("Encyc. Brit.") is recommended as a Text-Book

DYNAMICS.

For Synopsis of this Course, see under Science.

Summer Session, 1896.

Advanced Experimental Physics.

W. PEDDIE, D.Sc., *Lecturer.*

In this Class such subjects as are treated mathematically in the Winter Advanced Honours Course of Natural Philosophy will be treated fully from the experimental point of view. The Course is also intended to suit the requirements of undergraduates in Experimental Science. It is proposed to treat experimentally the advanced parts of Light, Electricity, Magnetism, &c. In connection with the Undulatory Theory, the following subjects will be discussed:—Reflection, refraction, and interference of ordinary and of polarised light; conical refraction; diffraction; electro- and magneto-optics; and the various optical phenomena of crystalline substances. In Electricity and Magnetism such subjects as the discharge of electricity through gases; the screening effect of conducting sheets, and other phenomena associated with rapidly alternating electromotive forces; electromagnetic undulations; magnetic hysteresis, &c., will be treated. The experimental investigation of reciprocally related physical phenomena will be specially illustrated from all branches of physics; and, on the dynamical side, special attention will be devoted to the realisation of dynamical systems illustrative of physical phenomena.

Tutorial Class.

Natural Philosophy (*Advanced Honours*).

The work in this Class will correspond as closely as possible to the work of the Winter Advanced Honours Course—Undulatory Theory, &c., being fully treated. The Class is intended for Students preparing for the above Winter Course, or for the Advanced Honours Examination.

ASTRONOMY.

PROFESSOR COPELAND.

(*Eighty Lectures and Twenty Meetings of two hours each for Observatory work, which must not be on the same days as the Lectures.*)

Lectures on Practical Astronomy, preceded by an introductory address, will be delivered on Mondays, Tuesdays, Wednesdays, and Thursdays. Instruction in the use of portable and fixed astronomical instruments will be given at the Royal Observatory on Blackford Hill, on Fridays, beginning at 8 P.M. Attendance at the evening demonstrations is obligatory on all who take Astronomy as a qualifying course for graduation. The Lectures will be divided into two courses, the first of which will embrace the theory and use of Astronomical Instruments, together with as much General Astronomy as is requisite to guide the student in making observations in the field as well as in an observatory. The Second Course will treat of the utilization of observations of Comets, etc., in the computation of orbits and ephemerides.

CHEMISTRY.

PROFESSOR CRUM-BROWN.

This Course is the same as that provided for Students of Medicine and Science. It embraces One Hundred Lectures and Fifty Meetings for Practical Work in the Practical Chemistry Class-Room.

ZOOLOGY.

PROFESSOR EWART.

The Course is the same as that provided for Students of Medicine and of Science. It embraces Fifty Lectures and Fifty hours for Practical Work.

BOTANY.

PROFESSOR BAYLEY BALFOUR.

The Course is the same as that for Students of Medicine and of Science. It embraces Fifty Lectures and Fifty hours for Practical Work.

GEOLOGY, INCLUDING MINERALOGY.

PROFESSOR JAMES GEIKIE.

For Synopsis of this Course, see under Pure Science.

IV.—DEPARTMENT OF HISTORY AND LAW.

HISTORY.

(PROFESSORS PROTHERO, KIRKPATRICK, TAYLOR, BALDWIN BROWN, AND MACKINTOSH.)

A. ORDINARY COURSES.

I. PROFESSOR PROTHERO'S CLASS.

Twelve noon.

The Course, extending to a hundred meetings of the Class, qualifies for Graduation in Arts.

The subject to be treated of, until further notice, is GENERAL BRITISH HISTORY, divided into the following Periods and Subjects, of which a fuller Syllabus may be obtained on application to the Professor after the commencement of the Session :—

Part I.—1. Celtic and Roman Britain (to A.D. 400).—2. The Anglo-Saxon and Scottish Conquests (400-613).—3. The Early Christian Church in Britain and Ireland.—4. The formation of the English and Scottish Kingdoms (613-843).—5. The Celt in Wales and Ireland.—6. The Early English Monarchy (827-1013).—7. The First Danish Conquest (855-901).—8. England, Scotland, and the Danes (901-979).—9. The Second Danish Conquest (979-1013).—10. The Danish Kings (1013-1042).—11. The Norman Conquest (1042-1087).—12. The making of Scotland (685-1018).—13. The Norman Monarchy (1066-1135).—14. The Anarchy (1035-1054).—15. The Angevin Monarchy (1154-1199). 16. Celt and Teuton in Scotland (1018-1174).—17. Conquest of South Wales (1055-1165).—18. Norse and English Conquests in Ireland (795-1175).—19. The Charters (1199-1217).—20. The growth of Parliament (1217-1272).—21. The Reforms of Edward I.—22. England, Wales, Scotland, and Ireland (1175-

1328).—23. The Great War with France, part i. (1327-1377).—24. The Lancastrian Revolution (1377-1413).—25. Independent Scotland (1328-1424).—26. The Great War with France, part ii. (1413-1453).—27. The Yorkist Revolution (1453-1485).—28. The restoration of order (1485-1509).—29. King and Nobles in Scotland (1424-1513).

Part II.—30. The Tudor Monarchy (1509-1603).—31. The Reformation in England and Scotland (1529-1603).—32. England, Scotland, and Europe (1509-1603).—33. Crown and Parliament (1603-1640).—34. The Long Parliament and the Protectorate (1640-1660).—35. The Restoration (1660-1685).—36. The Revolution (1685-1692).—37. Whigs and Tories. William III. and Marlborough (1689-1715).—38. Scotland and Ireland: the Union (1688-1715).—39. Colonies and Commerce (1600-1715).—40. The Whig Supremacy (1715-1760).—41. India and America (1715-1765).—42. George III. and the Parliament (1760-1784).—43. The American War (1765-1783).—44. Pitt and the French Revolution (1784-1815).—45. Ireland: the Union (1715-1800).—46. India (1765-1815).—47. Reaction and Reform (1815-1832).—48. The Reformed Parliament (1832-1866).—49. The Crimean War and the Mutiny (1853-1858).—50. The growth of Democracy (1866-1894).

N.B.—During the Session 1895-96 the Lectures will deal mainly with Part I. of the above Syllabus.

WORK OF THE CLASS.—1. Lecture daily, except Saturdays, at twelve o'clock. One hour a week, if possible, will be devoted to catechetical work, notes on special points, and original authorities.

2. Four Class Examinations will be held, and two or more Essays set, during the Winter Session. Honours will be awarded to candidates distinguished both in the examinations and in the essays.

3. The History Reading-Room (adjoining Professor Kirkpatrick's Class-Room) may be consulted by members of the History Classes on Mondays, Tuesdays, Thursdays, and Fridays from 10.30 to 1.30.

Books recommended.—For elementary purposes, S. R. Gardiner's "Student's History of England," or J. R. Green's "Short History of the English People," or J. F. Bright's "History of England." For wider study, see the lists given by the above-mentioned authors, and in the "Introduction to English History" by Gardiner and Mullinger.

II. PROFESSOR KIRKPATRICK'S CLASS.

(See p. 121).

III. PROFESSOR TAYLOR'S CLASS.

(See p. 494).

IV. PROFESSOR BALDWIN BROWN'S CLASS.

(See p. 119).

V. PROFESSOR MACKINTOSH'S CLASS.

(See p. 121).

B. GRADUATION IN HISTORY WITH HONOURS.

Candidates for Honours in History may take any of the following as *Ordinary Courses* in History, under Section xi. (3) of the Arts Ordinance :—

(*a*) By Professor Prothero on British History ; (*b*) by Professor Kirkpatrick on Constitutional History ; (*c*) by Professor Taylor on Ecclesiastical History ; (*d*) by Professor Baldwin Brown on History of Art ; (*e*) by Professor Mackintosh, half-course on History of Roman Law, and by Professor Kirkpatrick (half of his course on Constitutional History).

The *Honours Courses* at present available are :—

a By Professor Kirkpatrick on "Wycliffe : his Times and Political Influence ;" (*b*) by Professor Prothero on "England and Europe, 1815-1878 ;" (*c*) by Professor Baldwin Brown on Classical Archæology.

Note.—Mr David P. Heatley, Assistant to Professor Kirkpatrick, will lecture next Winter Session on "The English Kingship." This Advanced Course of twenty lectures is auxiliary to the Courses delivered by the Professors of History, and may be attended by their Students without fee.

Syllabuses of the above Courses are obtainable on application at the Matriculation Office, or from the respective Professors.

I. *Wycliffe: his Times, Political Influence, &c.*

PROFESSOR KIRKPATRICK.

I. Introductory—conflicts between State and Church—precursory of Wycliffe. II. Outline of Wycliffe's career—his doctrines—Lollardy—survival of Wycliffe's influence. III. The Great Schism—the Empire and the Papacy—Huss, Jerome, of Prague, and Peter Payne—Luther. IV. Illustrations of Wycliffe's doctrines from his works and other original sources.

Syllabus on application to the Professor, or at the Matriculation Office.

Books recommended.—Wycliffe's Works—"Select English Works," ed. by Thomas Arnold, 3 vols., 1869-71; "English Works of Wyclif hitherto unprinted," ed. by F. D. Matthew, 1880; "Johann von Wiclif und die Vorgeschichte der Reformation" (by Dr G. V. Lechler, 2 vols., Leipzig, 1873) (or translation by Lorimer); "Fasciculi Zizaniorum," ed. by W. W. Shirley (Rolls Series, 1858); "Political Songs," ed. by Wright (Rolls Series); "Chronicon Angliae," ed. by E. M. Thompson, 1874; Works of Langland and Chaucer; Walsingham's "Historia Anglicana," ed. by Riley (Rolls Series); Loserth's "Wiclif und Hus" (or translation); James Baker's "Peter Payne, a great forgotten Englishman;" Palacky's "Documenta Magistri Jo. Hus vitam illustrantia" (1403-18); Wycliffe's "Wicket" (Oxford, 1612 and 1828) and "Trialogus" (ed. by Lechler; Clar. Press); Creighton's "Papacy during the Reformation" (especially vols. I. and II.), &c.

These Lectures, fifty in number, qualifying as a full course for graduation in Arts with Honours in History, or with Honours in English, or as a half-course for graduation in Law, will be given on Mondays, Tuesdays, and Thursdays, at 4 P.M., beginning on Tuesday, 15th October 1895 (but, after Christmas, on Tuesdays and Thursdays only). Students attending them will have free access to the History Reading

Rooms, superintended by the Professor's Assistant (Mr David P. Heatley, late Vans Dunlop Scholar in History), daily (except Wednesdays and Saturdays) from 10.30 to 1.30. They will also be entitled to attend Mr Heatley's advanced course on "The English Kingship," on Wednesdays, at 11, without additional fee.

II. *England and Europe*, 1815-1878.

10 A.M.

PROFESSOR PROTHERO.

Part I. 1. Europe after the Peace of Paris, 1815.—2. Castlereagh, Metternich, and the Holy Alliance (1815-20).—3. Canning and the Liberal-Nationalist movements: the Zollverein (1820-29).—4. Canning and the Eastern Question (1821-29).—5. England, Ireland, and Catholic Emancipation (1815-29). *Part II.* 6. The Revolution of July, and the Reform Bill (1829-32).—7. Germany, the Netherlands, Switzerland, Italy, Poland, and Hungary (1830-34).—8. Spain and Portugal (1829-47).—9. The Eastern Question (1829-41).—10. The Reformed Parliament in England (1832-48).—11. Ireland and Repeal (1829-48).—12. Switzerland and the Sonderbund (1834-48).—13. The Bourgeois Monarchy in France (1830-47). *Part III.* 14. The Revolution of February: Napoleon III (1847-52).—15. Germany, Austria, and Hungary (1848-52).—16. Spain, Portugal, and Italy: Mazzini (1848-52). — 17. The Sleswig-Holstein Question (1848-52).—18. The Second Empire (1852-70).—19. England and Ireland (1848-67).—20. The Eastern Question: Crimean War (1841-57).—21. Italy: Cavour and Garibaldi (1852-62).—22. Denmark, Germany, Italy: Bismarck (1862-66).—23. The North-German Confederation and Austria-Hungary (1866-70).—24. The Franco-German War: Italy (1866-71). *Part IV.* 25. The French Republic, the German Empire, the Kingdom of Italy (1871-78).—26. Russia, Poland, Greece, and Turkey (1857-75).—27. Spain (1868-76).—28. England and Ireland (1868-78).—29. The Triple Alliance (1871-78).—30. The Eastern Question: Russo-Turkish War (1875-78).

Books recommended.—Lodge, "Modern Europe" (Murray, 1885); Dyer, "Modern Europe," Vol. iv.; Fyffe, "Modern Europe," Vols. ii., iii.; Martineau, "History of the Peace"; Bright, "History of England," Vols. iii., iv.; Lavallée, "Hist. des Français," Vols. v., vi.; Kinglake, "Crimean War"; Moltke, "Franco-German War" (transl.); Memoirs of Guizot, Chateaubriand, and Broglie; Hillebrand, "Geschichte Frankreichs"; Grégoire, "Histoire de France"; Oncken, "Allgemeine Geschichte," Div. iv.; Sybel, "Die Begründung des Deutschen Reiches" (transl.); Lowe, "Life of Bismarck"; Mezadé, "Le Comte de Cavour"; Hertslett, "Map of Europe by Treaty"; Atlases of Historical Geography, by Spruner, Droysen, Wolff, Colbeck, or Gardiner.

This Course of Fifty Lectures also qualifies for graduation in Arts with Honours in History. The Lectures will be given on Mondays, Wednesdays, and Fridays at 10 A.M., beginning on 16th October.

Two class examinations will be held, and two or more essays set, during the Winter Session. Students in this class may also attend Mr Heatley's advanced course on "The English Kingship" (Wednesdays at 11), without additional fee, and may use the History Reading-Room.

III. *Classical Archæology and History of Ancient Art* (see p. 86).

FINE ART.

PROFESSOR BALDWIN BROWN.

This Course will extend to one hundred meetings of the Class, and will qualify as an alternative Course for the M.A. degree.

The Lectures are designed—

1. To bring before students, by means of critical descriptions and illustrations, the chief ancient and modern works of Architecture, Sculpture, Painting, and the Decorative or Industrial Arts.

2. To show how these works are connected in their origin and use with the national and social life of successive epochs; and conversely, how the study of Artistic Monuments illustrates Classical and Biblical literature, and bears on historical investigation in general.

3. To explain as far as practicable the technicalities of the various Arts, and to open up those aspects of Art which present themselves naturally to the artist, but are sometimes overlooked by the literary student.

The course practically divides itself into two, about half the meetings being devoted to the more purely historical, half to the artistic and technical aspects of the subject.

On the historical side—

The characteristics of different styles and schools of Art will be broadly indicated, but this part of the subject, which can be studied from books, will not be dwelt upon at length. In each Session, however, special attention will be paid to some one important phase of Art. That selected for study in Session 1895-96 is the History of the Arts in mediæval Britain.

On the artistic side—

Particular stress is laid on the explanation of different materials and technical processes, as upon these largely depend the particular forms in which beauty is realised in the various works of human hands.

The following are the arrangements for the work of the Class :—

There are Lectures daily at 3 P.M., but the meeting on Friday is of a less formal kind, and affords opportunity for the discussion of special points of interest or difficulty.

Class examinations are held, and a series of eight Essays are set for the Cousin Prize (£15). The Essays are included in the work required from those taking the Course for Graduation.

The Class Library and Reading-Room will be open to members of the Class, according to arrangements to be afterwards adjusted.

Visits to Museums, &c., take place from time to time on Saturdays.

In connection with the Class Library, students have access to collections of examples in the form of casts, photographs, &c.

The Professor's manual, "The Fine Arts," is used, so far as it goes, as a text-book. Other books to be read by those taking the Course for Graduation are indicated on page .

CLASSICAL ARCHÆOLOGY FOR CLASSICAL HONOURS.

A Course of Fifty Lectures on Classical Archæology, qualifying as an optional subject for Honours in Classics, will also be given. For details, see page 86.

This Course also qualifies as an alternative subject for Honours in History.

CONSTITUTIONAL LAW AND HISTORY.

PROFESSOR KIRKPATRICK.

This Course is divided into two half-courses, the first treating mainly of the Constitutional History of England, the second treating of that of the United States of America, of France, Germany, Switzerland, etc. (see under Faculty of Law).

ROMAN LAW.

PROFESSOR MACKINTOSH.

The Course of Lectures qualifying for Graduation in Arts to be delivered by the Professor of Roman Law next Winter Session will extend to eighty-eight meetings of the Class.

The Course will be divided into two distinct parts. The first half of the Course (extending to not less than forty-four meetings of the Class) will deal with the Constitutional and Legal History of Early Rome, the sources of the law, the rise of Jurisprudence, codification, and other topics belonging to the external history and the general part of the civil law. It is intended to serve as a historical introduction to the study of the special departments.

This half of the Course will terminate at the commencement of the Christmas Vacation, and it qualifies as a Half-Course for Graduation in Arts.

The second half of the Course will be devoted to a systematic exposition, in detail, of the law relating to persons and the family, and to property and real rights, according to the order of Justinian's Institutes.

The fee for the Half-Course is £2, 2s., and for the full Course, £4, 4s.

Text-Books.—The Institutes of Gaius and of Justinian.

In connection with the historical lectures students are referred to Muirhead's "Historical Introduction to the Private Law of Rome," Ortolan's "Histoire de la Législation Romaine" (of which there is an English translation), and Maine's "Ancient Law."

PUBLIC INTERNATIONAL LAW.

PROFESSOR SIR LUDOVIC GRANT, BART.

A Course of Forty Lectures on Public International Law will be delivered from the Chair of Public Law, commencing on 7th January 1896, at two o'clock.

The Class will meet *five* days a week.

The Course will include—

1. An historical retrospect.

2. Some account of the science and literature of Public International Law.

3. An examination of the sources, and a critical exposition of the leading doctrines, of Public International Law.

Students are recommended to consult Wheaton's History of the Law of Nations, Introduction; Nys's Les Origines du Droit International; Phillimore's International Law, Vol. I.; Lawrence's Essays on Modern International Law; Hall's International Law; Westlake's International Law; Pitt Cobbett's Select Cases. *Vide* under Faculty of Law.

Graduation in Arts.[1]

A.—REGULATIONS OF THE UNIVERSITY OF EDINBURGH RELATIVE TO THE DEGREE OF MASTER OF ARTS (M.A.), APPLICABLE TO ALL WHO ENTER THEIR ACADEMIC COURSE AFTER 1ST OCTOBER 1892.

For those who commenced attendance on qualifying Classes before 1st October 1892. See Regulations B, page 168.

The Degree admits to the General Council of the University, to professional Study for the Learned Professions, to the Army, &c. Under regulations, framed in virtue of the Education Act (1872), *the Degree qualifies for Masterships of Public Schools, subject to an examination in the methods of instruction, and three months' attendance in a Public School for the practice of teaching.*

ACADEMICAL YEAR.

I. (1) The Academical year in each University commences on the first day of October. The classes meet for the winter session (which includes not less than twenty teaching weeks) on such day thereafter as the Senatus of each University shall determine; and close not later than the tenth day of the following April.

(2) The University Court of each University institutes a summer session in such of the subjects or branches of subjects qualifying for graduation in Arts as may be determined by the said Court after consultation with the Senatus. Such session commences on such day as the Senatus of each University determines, and includes ten teaching weeks at least. The classes are conducted by the Professors, or by Lecturers appointed by the University Court.

II. The Curriculum for the degree of Master of Arts (M.A.) extends over not less than three winter sessions, or two winter sessions and three summer sessions.

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[1] The annual amount of Matriculation, Class Fees, &c., of the regular course in Arts may be estimated at about £10, 10s.

PRELIMINARY EXAMINATION.[1]

III. (1) Before entering on the Curriculum (subject to the *proviso* contained in Section IV., Sub-section 1) each student must pass a Preliminary Examination in the following subjects :—

1. English.
2. Latin or Greek.
3. Mathematics.
4. One of the following :—Latin or Greek (if not already taken), French, German, Italian, Dynamics.

(2) The examination must be passed in the matters and on the standards hereinafter defined ; but there is a higher and a lower standard in Latin, Greek, and Mathematics.

Candidates must pass on the higher standard in at least one of these three subjects, and may pass on the lower standard in either or both of the remaining two ; subject always to the conditions relative to attendance contained in Section IV. hereof.

(3) English includes Grammar and Composition, and the outlines of Geography and British History, and the standard must not be lower than that presently adopted for the Higher Grade Leaving Certificate of the Scotch Education Department.

(4) Latin and Greek comprise grammatical questions, translation into English from Latin or Greek authors not previously prescribed, and translation of plain passages or easy sentences from English into Latin or Greek. The higher standard must not be lower than that formerly adopted in the examination for a Curriculum of three sessions, or for the Higher Grade Leaving Certificate of the Scotch Education Department, and the lower standard must not be lower than that presently adopted for the Lower Grade Leaving Certificate of the said Department.

(5) French, German, and Italian comprise grammatical, literary, and easy philological questions, translation into English from French, German, or Italian authors not previously prescribed, and translation from English into French, German, or Italian ; and the standard must not be lower than that presently adopted for the Higher Grade Leaving Certificate of the Scotch Education Department.

(6) Mathematics on the lower standard comprises—(1) Arithmetic, including Vulgar and Decimal Fractions, Proportion, Percentage, Square Root, Simple Interest ; (2) Algebra, including Fractions, Factors, Square Root, Equations of the First Degree, Simultaneous Equations of the First Degree, Easy Quadratic Equations, Problems leading to the above Equations ; (3) Geometry—Euclid, Books I., II., and III. (or their equivalents), with easy deductions. Demonstrations other than Euclid's will be accepted if they assume no propositions which in Euclid's order are subsequent to the proposition under consideration.

[1] See also pages 140-142.

(7) Mathematics on the higher standard, in addition, comprises Euclid, Books IV., VI., and the first twenty-one propositions of Book XI. (or their equivalents), with deductions, Quadratic Equations, Trigonometry to the solution of Triangles inclusive, and the use of Logarithmic Tables.

(8) Dynamics means the Elementary Statics and Kinetics of Solids, Liquids, and Gases.

(9) A candidate is obliged to pass in all the required subjects at one or not more than two examinations, provided that he may offer himself for re-examination as often as may be necessary to satisfy this condition.

IV. (1) Attendance on any class does not qualify for graduation, unless the whole Preliminary Examination has been passed. But any Student who has passed in Latin, Greek, or Mathematics on the higher standard may attend a qualifying class in such subject or subjects without having passed in the other subjects of the examination, provided always that (*a*) no candidate will be allowed to present himself for examination in any subject qualifying for graduation until he has passed the whole Preliminary Examination, and (*b*) no Student will be admitted to a degree in Arts unless he has attended qualifying classes in the University granting the degree, or in another Scottish University, as provided by Section XXV. hereof, for three Academic years after he has completed his Preliminary Examination.

(2) Attendance on a class in any language included in the Preliminary Examination does not qualify for graduation, unless the candidate, before entering the class, has passed the Preliminary Examination in that subject, and on the higher standard where a double standard is provided. He may, for that purpose, attend any Preliminary Examination held during the course of his study, taking only the paper set in that subject; provided always that the provisions of the subsection immediately preceding have been satisfied.

(3) Attendance on a class in any language not included in the Preliminary Examination will not qualify for graduation, unless the candidate has previously passed an examination in that language on a standard as nearly as possible equivalent to the higher standard of the languages included in the Preliminary Examination.

(4) Attendance on a class of Mathematics or Natural Philosophy will not qualify for graduation unless the candidate, before entering the class—in addition to the examination in Mathematics on the Lower Standard required of all students—has passed an examination in the following subjects:—

(*a*) Euclid: Book VI., Propositions 1-19, or Geometry equivalent thereto.
(*b*) Algebra: Quadratic Equations, Ratio and Proportion.
(*c*) The Trigonometry of Right-angled Triangles.

(5) A student, who, having passed the Arts Preliminary Examina-

tion in accordance with the provisions of these Regulations, has thereafter obtained a certificate of attendance on a qualifying class of Mathematics, will not be required to pass any further examination in Mathematics as a condition of entering on the course of study for graduation in Science.

V. (1) The Preliminary Examination is held at each University twice in each year, under such regulations as the Senatus, with the approval of the University Court, may from time to time determine, and is conducted in writing.

(2) The Joint Board of Examiners has power to accept the Higher Grade Leaving Certificate of the Scotch Education Department in any subject as an equivalent for the Preliminary Examination in that subject; and to accept the Lower Grade Leaving Certificate of the said Department as an equivalent for the Preliminary Examination on the lower standard in Latin, Greek, and Mathematics; provided they are satisfied that the standard of the examination, at which the said certificates were granted, is not lower than that required by these Regulations.

(3) The Joint Board of Examiners has power to determine what examinations, if any, other than those for the Leaving Certificates of the Scotch Education Department may be accepted as equivalent to the Preliminary Examination in whole or in part, provided they are satisfied that such other Examinations are in fact equivalent thereto.

ORDINARY DEGREE.

VI. Candidates for the ordinary degree of Master of Arts may follow the Curriculum and take their degree in the subjects recognised for graduation under the Universities (Scotland) Act, 1858, subject always to the preceding provisions of these Regulations; or they may vary the Curriculum for graduation under the regulations contained in the immediately succeeding sections.

VII. (1) Candidates must attend full courses in at least seven subjects, and are examined on these subjects.

(2) Of these subjects four must be (*a*) Latin or Greek (not modern Greek); (*b*) English or a Modern Language (French, German, Italian, or Spanish), or History; (*c*) Logic and Metaphysics, or Moral Philosophy; (*d*) Mathematics or Natural Philosophy.

(3) The remaining subjects may be selected by the candidate from the Departments specified in Section IX. of these Regulations, under the following condition:—That the whole subjects taken must include either (*a*) both Latin and Greek (not modern Greek), or (*b*) both Logic and Moral Philosophy, or (*c*) any two of the following three subjects,—Mathematics, Natural Philosophy, and Chemistry.

VIII. (1) Each of the subjects must be studied in a full course of not less than one hundred meetings of the class on separate days, except in

cases where the Senatus, with the approval of the University Court, have sanctioned, as qualifying for graduation, half courses of not less than fifty meetings on separate days ; or where the Senatus, with the approval of the said Court, may, having regard to the nature of the subject, sanction full courses of less than one hundred or half courses of less than fifty meetings respectively.

(2) Two half-courses are held to be equivalent to a full course in such cases as the Senatus, with the approval of the University Court, may determine, and under such regulations as may from time to time be made for that purpose.

(3) Where a subject is taught in a practical class, as well as in a systematic class, the Senatus, with the approval of the University Court, regulates the course of study and determines the relative proportion of lectures and laboratory or practical work.

IX. The Departments of Study for graduation in Arts in each University, if adequate instruction is provided, include the following subjects, with such additions or modifications in any University as may hereafter be made by Ordinance of the University Court :—

1. *Language and Literature.*

Latin.	Italian.
Greek.	Sanskrit.
Modern Greek.	Hebrew.
English.	Arabic or Syriac.
French.	Celtic.
German.	

2. *Mental Philosophy.*

Logic and Metaphysics.	Education (Theory, History, and Art of).
Moral Philosophy.	
Political Economy.	Philosophy of Law.

3. *Science.*

Mathematics.	Zoology.
Natural Philosophy.	Botany.
Astronomy.	Geology.
Chemistry.	

4. *History and Law.*

History.	Constitutional Law and History.
Archæology and Art (History of).	Roman Law.
	Public Law.

X. Candidates who produce certificates that they have satisfied all the conditions prescribed by these Regulations, and who have passed the necessary examinations, are entitled to receive the ordinary degree of Master of Arts on payment of the fees required.

DEGREE WITH HONOURS.

XI. (1) The degree of Master of Arts may be taken with Honours in any of the following Groups, in which Honours Classes have been established in at least two subjects :—

(*a*) Classics (*i.e.* Latin and Greek, with optional subjects such as Comparative Philology, Ancient Philosophy, and Classical Archæology).
(*b*) Mental Philosophy.
(*c*) Mathematics and Natural Philosophy.
(*d*) Semitic Languages.
(*e*) Indian Languages.
(*f*) English (Language, Literature, and British History). English Literature is regarded as constituting the chief subject of this group, the linguistic and historical subjects being regarded as subsidiary thereto.
(*g*) Modern Languages and Literature.
(*h*) History.

(2) Every candidate must take up at least five subjects. Two of these subjects, under separate Professors or Lecturers, must be selected from the candidate's Honours Group ; and the five subjects must include one from each of the Departments of Language and Literature, Mental Philosophy, and Science, set forth in Section IX. of these Regulations.

(3) Every candidate must attend seven Classes, taking two Classes (one of which must be an Honours Class) in each of his Honours subjects.

(4) A candidate who has obtained Honours in any one Group may, before graduating, present himself again for examination in a second Honours Group. In such a case, he will not be required to attend more than two additional Classes, which must be Honours Classes, in the second Group.

(5) The examination in the subjects comprised in the candidate's Honours Group must be of a higher standard than that required for the ordinary degree of Master of Arts. In his other subjects the standard will be that required for the ordinary degree.

(6) The Senatus, subject to the provisions of Sections XVI. to XX. of these Regulations, from time to time determines what subjects are comprised in each Group, what subjects may be taken in half-courses, and in which Group they may be taken : Provided that no new Group shall be instituted except by Ordinance of the University Court.

(7) The provisions of Section VIII. of these Regulations applies to Candidates for Honours ; but, in their case, not fewer than fifty meetings, on separate days, extending over an entire winter session, will constitute a full course for an Honours Class ; and not fewer than twenty-five meetings on separate days, extending over half a winter session, or an entire summer session, will constitute a half course.

XII. (1) Every candidate must include Latin, or Greek, either in his Honours Group or as one of the subjects in which the standard of examination is that required for the ordinary degree of Master of Arts.

(2) Greek is compulsory for candidates for Honours in Mental Philosophy.

(3) Candidates for Honours in English, or Modern Languages and Literature, or History (Groups *f*, *g*, *h* of Section XI. hereof) must include within the whole subjects taken for their degree (*a*) Logic and Metaphysics or Moral Philosophy, and (*b*) Mathematics or Natural Philosophy.

XIII. (1) The whole examination in the candidate's Honours Group must be taken at one time, and the whole examination necessary for graduation with Honours must be taken within five years from the date of the candidate's first matriculation after having passed the Preliminary Examination, unless that period shall be extended by the Senatus on special cause shown; and in every such case the Senatus must make a report to the University Court setting forth the reasons for the extension.

(2) Candidates for Honours may be examined, at any time during their Curriculum, in the three subjects in which the standard of examination is that required for the ordinary degree of Master of Arts.

XIV. (1) A candidate who has passed the examinations necessary for the ordinary degree of Master of Arts, but who has not yet graduated, may present himself for Honours within five years from the date of his first matriculation after having passed the Preliminary Examination, and will not be required to attend further classes:—subject always to the provisions of Section XII. hereof.

(2) No one is allowed to present himself a second time as a candidate for the degree of Master of Arts with Honours, who, upon examination, has failed to obtain Honours.

(3) A candidate is held to have presented himself who has notified his name for examination in accordance with the University regulations. But it will be in the power of the Senatus to relax this rule on special cause shown; and in every such case the Senatus must make a report to the University Court setting forth the reasons for the relaxation.

XV. (1) In each Group there are three Grades of Honours, to be denominated respectively the First, Second, and Third Class. The names of the candidates entitled to Honours in each class are arranged in alphabetical order.

(2) For the degree of Master of Arts with Honours a Diploma is given setting forth the subjects in which he has taken Honours.

BOARDS OF STUDIES.

XVI. The Senatus of each University from time to time institutes Boards of Studies corresponding as nearly as may be to the Departments of Study enumerated in Section IX. of these Regulations.

XVII. Each Board of Studies consists of such Members of the Senatus and Lecturers in the University as the Senatus may from time to time select, and the Senatus appoints one of the Members of the Board to be Convener thereof.

XVIII. Before the end of each winter session each Professor and Lecturer in the said Departments of study must submit to the proper Board of Studies for its approval a syllabus of the subjects and books proposed for the work of his class for the next Academical year (and also a syllabus of the subjects and books to be prescribed for the Examinations for the Ordinary Degree of M.A. in the next Academical year, and for the Honours Examinations in the next Academical year but one). As soon as such approval has been given, these syllabuses must be transmitted to the Faculty of Arts for its consideration. The syllabuses, with such observations as the Faculty of Arts may see fit to make thereon, must then be transmitted to the Senatus for its sanction.

XIX. (1) Before the end of each winter session each Board of Studies must prepare a scheme, defining, for the Academical year next but one following, the classes which are deemed to be Honours Classes, and the subjects and courses of reading for Honours in its Department, and must report the same to the Faculty of Arts for its consideration. The scheme, with such observations as the Faculty of Arts may see fit to make thereon, is then transmitted to the Senatus for its sanction.

(2) Each Board must in like manner make recommendations through the Faculty of Arts to the Senatus in regard to the half-courses which may be sanctioned under these Regulations, and the lectures which may be given on special subjects.

XX. The Principal and the Dean of the Faculty of Arts are *ex-officio* Members of each Board of Studies. The Convener presides, and, in his absence, each meeting appoints its own Chairman, and every Chairman has a deliberative, and, in cases of equality, a casting vote.

GENERAL.

XXI. In the case of a foreign student, whose native language is other than English, the standard required in English in the Preliminary Examination is such as the Joint Board of Examiners deems sufficient. In the case of a student, whose native language is other than European, the Senatus may accept as an alternative to Latin or Greek any other classical language, such as Sanskrit or Arabic, subject always to the provisions of Section IV., Sub-section 3 hereof.

XXII. If a student, before passing the Preliminary Examination, has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class as qualifying for graduation, on condition of his passing the full Preliminary Examination within such time thereafter as the Senatus may appoint; and in every such case

the Senatus must make a report to the University Court setting forth the reasons for the relaxation.

XXIII. The examination in all the languages in the Curriculum must, as far as possible, be on the same standard in examinations for the same degree, and will in all cases test the candidate's knowledge of the history and literature of the several countries.

XXIV. A candidate for the degree of Master of Arts is not deemed to have attended a class as part of the Curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

XXV. A student, who has given attendance at classes recognised as qualifying for graduation during one or more sessions in any one or more of the Scottish Universities, may complete his Curriculum by giving attendance during the remainder of his course in another Scottish University, and may proceed to a degree in the latter University in the same way, in all respects as if the previous part of his Curriculum had been taken therein: Provided always that every such student must produce, to the satisfaction of the Senatus of the latter University, certificates of his having passed the Preliminary Examination, and of his attendance at the former University or Universities, and must be examined in all the subjects necessary for a degree of Master of Arts by the Examiners of the University in which he completes his Curriculum, and in which alone he will be allowed to graduate; and that no such student will be admitted to a degree in any University unless he has given attendance in such University during the last winter session of his Curriculum, and one other winter session or two summer sessions.

XXVI. A candidate for the degree of Master of Arts with Honours, who has failed to be placed in any class, may, provided that in the opinion of the Examiners he has given evidence of sufficient attainments in any subject for the ordinary degree of Master of Arts, receive from them a certificate of having passed in such subject, which will count *pro tanto* as part of the examination required under the regulations for the ordinary degree of Master of Arts.

XXVII. The degree of Master of Arts is in no case conferred on persons who have not satisfied the conditions hereinbefore set forth, and is not conferred *honoris causa tantum*.

XXVIII. A student who, at the time these Regulations came into operation, had commenced his course of study with a view to graduation in Arts in any of the Scottish Universities under the regulations in force at the time in such University, may complete his course and become a candidate for the degree of Master of Arts, with or without Honours, in conformity with such regulations. And any such student who has passed the examination hitherto required for admission to a Curriculum of three sessions, if he desire to come under

these regulations, is exempted from the Preliminary Examination herein required.

XXIX. Students may attend any classes without having passed the Preliminary Examination within the meaning of these Regulations, but such attendance will not qualify for graduation.

XXX. Attendance on classes in the Faculty of Arts in which the teaching is on the standard at present recognised for the classes hitherto known as junior or middle classes, will in no case qualify for graduation. It is competent for the University Court in each University to discontinue the Junior Classes, or Middle Classes, where such exist, in Latin, Greek, and Mathematics, when, in the opinion of the Court, the provision for Secondary Education in schools throughout the country is sufficient to render such classes no longer necessary.

XXXI. Ordinances numbered 12, 14, 18, and 69 of the Commissioners under the Universities (Scotland) Act, 1858, as altered under the provisions of the said Act, are repealed, in so far as they are inconsistent with these Regulations.

Regulation regarding the Instruction and Examination of Women in Chemistry, Botany, and Zoology for Graduation in Arts.[1]

Any Woman who has received the requisite instruction in Chemistry, Botany, and Zoology in any Scottish University, or in the Edinburgh School of Medicine for Women, Surgeon Square, Edinburgh, or in the Medical College for Women, Chambers Street, Edinburgh, will (subject to the provisions of Ordinance No. 18, General No. 9, Regulations for the Graduation of Women,[2] &c.) be admitted to Examination in these subjects for Graduation in Arts.

Any Woman, not a Matriculated Student of the University, availing herself of the permission to attend the Courses on Chemistry, Botany, or Zoology, at the above-named Schools of Medicine in Edinburgh, with a view to Graduation in Arts, must, at the commencement of each year of such attendance, enrol her name in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

[1] Extra Academical Teachers in Edinburgh, whose Lectures qualify Women Students for Graduation in Arts in this University:—

T. W. Drinkwater, Ph.D., Chemistry and Practical Chemistry, 17th December 1894.

J. Arthur Thomson, M.A., Zoology, 17th December 1894.

[2] See Ordinance Appendix to Calendar, 1892-93, page 51.

NEW REGULATIONS FOR THE ENCOURAGEMENT OF SPECIAL STUDY AND RESEARCH, &c., AND FOR HIGHER DEGREES IN ARTS AND SCIENCE, &c.

The following Ordinances of the Universities' Commissioners have been laid before Parliament, and will, in all probability, come into operation before 1st October 1895.

I. Ordinance No. 61, General No. 23—Regulations for the Encouragement of Special Study and Research, and for the Appointment of Research Fellows.

I. It shall be in the power of the Senatus Academicus in each University, with the approval of the University Court, to make regulations under which graduates of Scottish Universities, or of other Universities recognised by the University Court for the purposes of this Ordinance, or other persons who have given satisfactory proof of general education and of fitness to engage in some special study or research, may be admitted to prosecute such study or research in the University.

II. It shall be the duty of the Senatus Academicus in each University—

(1) To receive and decide upon all applications for admission to prosecute special study or research.
(2) To prepare a list of all persons so admitted (hereinafter referred to as Research Students).
(3) To make regulations for the supervision of their work.
(4) To satisfy themselves from time to time that the Research Students are carrying on their work in the University in a satisfactory manner.
(5) To suspend or exclude from any course any student whose conduct or progress is unsatisfactory.

III. Every applicant for admission must send in to the Senatus Academicus a written application stating any degree or other distinction which he has already obtained, the line of study or research which he wishes to prosecute and the probable period of its duration, together with evidence as to his character, capacity, and general qualifications.

IV. Any application for admission shall be in the first instance referred by the Senatus Academicus to the appropriate Faculty, or to a Committee appointed by the Senatus; one member of the Committee shall always be a Professor or Lecturer within whose department the proposed line of study or research falls. No applicant shall be recommended by the Faculty or the Committee who has not satisfied them

by examination or otherwise that he is qualified to prosecute the proposed line of study or research, and further—

(*a*) That his proposed line of study or research is a fit and proper one;

(*b*) That he possesses a good general education;

(*c*) That he is of good character;

(*d*) That he proposes to prosecute his studies or research during a period to be approved by the Senatus Academicus.

The Faculty or the Committee shall make a report to the Senatus Academicus upon each application. It shall also be their duty, subject to the regulations of the Senatus Academicus, to provide for the supervision of the Research Student's work, and to report at least once a year to the Senatus as to his progress and conduct. The Senatus shall then determine whether he shall remain a Research Student.

V. Every Research Student shall be required to matriculate each year, paying the ordinary fee.

VI. Research Students shall have access to and the use of the University Laboratories and Museums, under such conditions as to payment and otherwise as the University Court, after consultation with the Senatus Academicus, may determine.

VII. The title of Research Fellow may be conferred by the Senatus Academicus, with the approval of the University Court, on Research Students who have shown special distinction. Such title shall not of itself confer any right to stipend, but it shall be in the power of the University Court to provide a stipend of such amount and for such period as it may think fit to any Research Fellow under the powers of Section XI., Sub-section 8, of Ordinances numbered 25 and 27, Section X., Sub-section 8, of Ordinance numbered 26, and Section IV., Sub-section 2, of Ordinance numbered 46.

VIII. (1) The Research Fellows shall be appointed as aforesaid after consideration of the report or reports submitted in terms of Section IV. hereof.

(2) The title of Research Fellow may be conferred either at the commencement of the Research Student's course of study or research, or at any time during its progress, as the Senatus Academicus may determine.

(3) Research Fellows shall retain their title and stipend, if any, for the period during which they are engaged in special study or research in the University, and no longer.

(4) Research Students who have been appointed Research Fellows shall continue to be subject to the conditions above prescribed as to the supervision of their work and the reports to be made thereon.

IX. Nothing herein contained shall prejudice the right of Research Students to such Fellowships, Scholarships, or Prizes as may be open to them by Ordinance or Deed of Foundation.

X. The University Court may, subject to the provisions of Section XI., Sub-section 8, of Ordinances numbered 25 and 27, Section X., Sub-section 8, of Ordinance numbered 26, and Section IV., Sub-section 2, of Ordinance numbered 46, provide such sums as it may think fit in aid of the expenses of Special Study or Research.

XI. This Ordinance shall come into force from and after the date of its approval by Her Majesty in Council.

II. Ordinance No. 62, General No. 24—Regulations for Higher Degrees in Arts and Science.

Degree of D.Sc.

I. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in Mathematics and Natural Philosophy under the conditions prescribed by the Regulations for Degrees in Arts, or under the Regulations previously in force in such University, may offer themselves for the degree of Doctor of Science (D.Sc.) in the same University after the expiry of five years from the date of their graduation in Arts, under the same conditions as if they held the degree of Bachelor of Science.

II. Research Students within the meaning of Ordinance No. 61 [General, No. 23—Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows] may offer themselves for the degree of Doctor of Science of the University in which they have prosecuted some special study or research under that Ordinance, although they have not taken the degree of Bachelor of Science or the degree of Master of Arts with honours as aforesaid in that University; provided—

(1) That they hold the degree of Bachelor of Science or Bachelor of Medicine of a Scottish or any recognised University, or a degree of any such University, which the Senatus Academicus shall hold to be equivalent to the degree of Bachelor of Science or to the degree of Master of Arts with first or second class honours in Mathematics and Natural Philosophy; provided that candidates who hold any such degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of Doctor of Science, to pass an examination equivalent to an Honours or to a Final Science examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and that they produce evidence of satisfactory progress in the special study or research undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

III. All candidates for the degree of Doctor of Science shall present a thesis or a published memoir or work, to be approved by the Senatus on the recommendation of the Faculty of Science; provided that, if required by the Senatus, the candidate shall also be bound to pass such an examination conducted orally or practically, or by written papers, or by all of these methods, on the subjects of his special study or of his thesis, as may from time to time be determined. The thesis shall be a record of original research undertaken by the candidate, and shall be accompanied by a declaration signed by him that the work has been done and the thesis composed by himself.

Degree of D.Phil.

IV. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in Mental Philosophy, under the conditions prescribed by Ordinance No. 11 [General No. 6—Regulations for Degrees in Arts], or under the Regulations previously in force in such University, may offer themselves for the degree of Doctor of Philosophy (D.Phil.) in the same University after the expiry of five years from the date of such graduation.

V. Research Students as aforesaid may offer themselves for the degree of Doctor of Philosophy of the University in which they have prosecuted some special study under Ordinance No. 61 [General, No. 23—Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows], although they have not taken the degree of Master of Arts with honours as aforesaid in that University; provided—

(1) That they hold the degree of Master of Arts with first or second class honours in Mental Philosophy of any Scottish University, or a degree of any recognised University, which the Senatus Academicus shall hold to be equivalent to such degree with honours as aforesaid; provided that candidates who hold such a degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students, with a view to the degree of Doctor of Philosophy, to pass an examination equivalent to an honours examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent no less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and produce evidence of satisfactory progress in the special study undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

VI. All candidates for the degree of Doctor of Philosophy shall present a thesis or a published memoir or work, which shall be an original contribution to learning, to be approved by the Senatus Academicus on the recommendation of a Committee appointed by the Senatus; provided that, if required by the Senatus, a candidate shall also be bound to pass such examination, conducted orally or otherwise, on the subject of his thesis or of his special study as may from time to time be determined. The thesis, or memoir, or work shall be accompanied by a declaration signed by the candidate that it has been composed by himself. If the thesis has not already been published, it shall be published by the candidate in such manner as the Senatus shall approve.

DEGREE OF D.LITT.

VII. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in any group other than Mathematics and Natural Philosophy or Mental Philosophy, under the conditions prescribed by Ordinance No. 11 [General No. 6—Regulations for Degrees in Arts], or under the Regulations previously in force in such University, may offer themselves for the degree of Doctor of Letters (D.Litt.) in the same University after the expiry of five years from the date of such graduation.

VIII. Research Students as aforesaid may offer themselves for the degree of Doctor of Letters of the University in which they have prosecuted some special study under Ordinance No. 61 [General No. 23—Regulations for the Encouragement of Special Study and Research, and for the appointment of Research Fellows], although they have not taken the degree of Master of Arts with honours as aforesaid in that University; provided—

(1) That they hold the degree of Master of Arts with first or second class honours in any group except Mathematics and Natural Philosophy or Mental Philosophy of any Scottish University, or a degree of any recognised University, which the Senatus Academicus shall hold to be equivalent to such degree with honours as aforesaid; provided that candidates who hold such a degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of Doctor of Letters, to pass an examination equivalent to an honours examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University

granting the degree, and produce evidence of satisfactory progress in the special study undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

IX. All candidates for the degree of Doctor of Letters shall present a thesis or a published memoir or work, which shall be an original contribution to learning, to be approved by the Senatus Academicus on the recommendation of a Committee appointed by the Senatus; provided that, if required by the Senatus, a candidate shall also be bound to pass such examination, conducted orally or otherwise, on the subject of his thesis or of his special study as may from time to time be determined. The thesis, or memoir, or work shall be accompanied by a declaration signed by the candidate that it has been composed by himself. If the thesis has not already been published, it shall be published by the candidate in such manner as the Senatus shall approve.

X. . . . . .

XI. The degrees of Doctor of Science in Mental Science or Doctor of Science in Philology shall no longer be conferred by any Scottish University.

XII. Candidates who have already completed the necessary attendance on classes required for the degree of Doctor of Science in Mental Science or Doctor of Science in Philology, under regulations hitherto in force in any Scottish University, may proceed to the degree of Doctor of Philosophy, or of Doctor of Letters, as the case may be, under this Ordinance:—provided such candidates comply with the provisions of Section VI. or Section IX. hereof, as the case may be, and that a period of not less than five years shall have elapsed from the date of their graduation as Masters of Arts.

XIII. The degrees of Doctor of Science, Doctor of Philosophy, and Doctor of Letters shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

XIV. The fee to be paid for the degree of Doctor of Philosophy shall be ten guineas.

XV. The fee to be paid for the degree of Doctor of Letters shall be ten guineas.

XVI. This Ordinance shall come into force from and after the date of its approval by Her Majesty in Council.

JOINT BOARD OF EXAMINERS FOR THE SCOTTISH UNIVERSITIES.

A Joint Board of Examiners, who have the control and supervision of the Preliminary Examinations, is appointed annually by the University Courts of the four Scottish Universities, and holds office for a year from 1st February to 31st January in the succeeding year. The Board sits for a year at each University in rotation in the following order, viz. :—Edinburgh, Glasgow, Aberdeen, St Andrews. The Principal of the University at which the Board sits is Chairman for the time, and the Secretary of the University Court of that University is Convener.

The following are the members of the Board for the current year (1st February 1895 to 31st January 1896), and its meetings take place at the University of Aberdeen :—

Chairman—Principal Sir William Geddes, LL.D., D.Litt.

Convener—Robert Walker, Esq., M.A.

Appointed by Aberdeen University—Professor Grierson, M.A., LL.D. ; Dr William Scholle ; William Coutts, Esq., M.A. ; David Craib, Esq., M.A.

Appointed by St Andrews University—Professor Roberts, D.D. ; Professor P. R. Scott Lang, M.A., B.Sc. ; Dr Hugh Campbell ; John B. Charles, Esq., M.A.

Appointed by Edinburgh University—Professor Chrystal, LL.D. ; James C. Smith, Esq., M.A. ; Otto Schlapp, Esq. ; Stewart Alan Robertson, Esq., M.A.

Appointed by Glasgow University—Professor Ramsay, Professor Bradley, M.A.; R. H. Pinkerton, Esq. ; Professor Strong.

The Joint Board from time to time issue Supplementary Regulations giving additional outlines of the subjects for the Preliminary Examination, and by virtue of an agreement between the four Scottish Universities, sets the papers for the Preliminary Examination (which are common to all the Scottish Universities). It also gives instructions to the Examiners with a view of securing an adequate and uniform examination in the various subjects.

PRELIMINARY EXAMINATION IN ARTS AND SCIENCE.

In addition to the Regulations for the Preliminary Examination for the Degrees in Arts, Sections III. to V. inclusively, and the Regulations for Degrees in Science, Sections 1 to 9 inclusively, the Joint Board have made the following Supplementary Regulations:—

31*st January* 1895.

1. English will include Grammar, Composition, Literature, History, and Geography.

(*a*) *Grammar* will include Analysis, Parsing, Derivation, and Correction of sentences.

(*b*) *Composition* will include an Essay and Paraphrasing.

(*c*) *Literature*—(i) In April and October 1895, and April and October 1896, will include a general knowledge of the life and works of the greater writers, and a more special knowledge of two or three of these writers.

For April and October 1895 the special subjects will be Shakespeare's "Julius Cæsar," and Scott's "Fortunes of Nigel." For April and October 1896 the special subjects will be Shakespeare's "Henry the Fifth," and Scott's "Fair Maid of Perth."

(ii) In and after April 1897, Literature will include a knowledge of certain works of two or three writers; but questions requiring a general knowledge of the life and works of the greater writers will no longer be set. One or two questions may be set, giving an opportunity to any candidates who have read widely in English Literature to show their knowledge; and the amount of prescribed work in English Literature will be increased.

N.B.—In October 1895, and April and October 1896, alternative papers will be set in English Literature—one on the lines laid down in paragraph (i), and the other on the lines laid down in paragraph (ii), the prescribed books being the same for each paper, and candidates may select whichever they prefer.

(*d*) *Geography* will include a general knowledge of the Geography of the World, and a special knowledge of the Geography of the British Empire.

(*e*) *History* will include a knowledge of one of the three following periods to be taken in successive years in the order herein mentioned, namely:—The Outlines of the History of both England and Scotland (*a*) from the Roman occupation to the Accession of James VI. (for April and October 1896); (*b*) from the Accession of James VI. to the Union of the

Kingdoms (for April and October 1897); (*c*) from the Union of the Kingdoms to the Reform Bill of 1832 (for April and October 1895).

2. The *Latin* Examination on the Higher Standard will be—Translation, Prose Composition, Grammar, and Sentences.

PRELIMINARY EXAMINATION IN ARTS AND SCIENCE.

In addition to the Regulations for the Preliminary Examination for the Degrees in Arts, Sections III. to V. inclusively, and the Regulations

After the word "*only*" in 8 (*a*) of the Additional Regulations of the Joint Board, page 141, insert :—

The Questions on Literature will be confined year by year to certain groups of authors, as in the following scheme, viz. :—

French.—In April and October, 1896.—(*XVIIth Century*)—Pascal, Descartes, Corneille, Racine, Molière, Boileau, La Fontaine, Mme. de Sévigné, Bossuet, Fénelon, La Rochefoucauld, La Bruyère. In April and October, 1897.—(*XVIIIth Century*)—Regnard, Lesage, Massillon, Saint Simon, Voltaire, Montesquieu, Vauvenargues, Marivaux, Jean Jacques Rousseau, Diderot, Buffon, Beaumarchais, Bernardin St. Pierre, Mirabeau. In April and October, 1898.—(*XIXth Century*)—Chateaubriand, Mme. de Staël, Lamartine, Victor Hugo, Alfred de Musset, Alexandre Dumas, George Sand, Balzac, Prosper Mérimée, Guizot, Thiers, Mignet, Michelet, About.

German. — In April and October, 1896. — Klopstock, Wieland, Lessing, Herder, Bürger, Voss, Friedrich Leopold Stolberg, Hölty, Leisewitz. In April and October 1897. — Goethe, Schiller, Klinger, Lenz, Schubert, Arndt, Körner, Rückert. In April and October, 1898.—Jean Paul, the Schlegels, Novalis, Tieck, Arnim, Brentano, Grillparzer, Heine, Uhland.

7th June 1895.

Kingdoms (for April and October 1897); (*c*) from the Union of the Kingdoms to the Reform Bill of 1832 (for April and October 1895).

2. The *Latin* Examination on the Higher Standard will be—Translation, Prose Composition, Grammar, and Sentences.

3. The *Greek* Examination on the Higher Standard will be—Translation, Sentences, and Grammar.

The passages for Translation both from Greek and Latin will include Prose and Verse.

4. The *Latin* Examination on the Lower Standard will be—Translation and Parsing, Prose Composition, Grammar, and Sentences.

5. The *Greek* Examination on the Lower Standard will be—Translation, Sentences, and Grammar.

6. In the Examination in Mathematics both on the Higher and on the Lower Standard each question in Geometry will consist of two parts, of which one will be an easy deduction or illustrative exercise on the proposition set as bookwork.

The paper in Mathematics on the Higher Standard will be devoted to the various subjects comprised in it as nearly as possible in the following proportion: two-fifths to Geometry, two-fifths to Algebra, and one-fifth to Trigonometry.

7. The paper on Dynamics will be directed to test the candidate's knowledge of the fundamental principles of the subjects included in it, and will not involve algebraical or geometrical difficulties. As far as possible each question will consist of two parts, one of which will be a numerical or other simple illustrative example of the principle with which the other part of the question deals.

8. For the Examination in French and German—

(*a*) Two papers will be set, both in French and German; the first paper to contain a passage for translation from English into French or German, with some short sentences of an idiomatic character; the second paper will contain a set of grammatical questions, two passages for translation into English (one in Verse, one in Prose), and a selection of Literary, Philological, or Historical questions, from which the candidate will be allowed to choose *one only*.

(*b*) An hour and a half will be allowed for the first paper, and two hours for the second.

Candidates who, having taken the Examination on the Higher Standard in any subject, have failed to pass on that Standard, but have obtained a percentage of marks equivalent to a pass on the Lower Standard, may be held to have passed the Examination on the Lower Standard.

N.B.—*This rule shall not apply to Mathematics in and after October* 1895.

EXAMINATIONS ACCEPTED AS EXEMPTING FROM THE PRELIMINARY EXAMINATION IN ARTS AND SCIENCE.

The Joint Board have agreed to accept the following Examinations as exempting from the Preliminary Examination in Arts and Science, either *wholly* or *in part* :—

1. A Degree in Arts or in Science, not being an Honorary Degree, in any of the Universities of the United Kingdom, shall exempt from the Preliminary Examination in Arts or in Science, as the case may be.

2. For the Preliminary Examination in Arts and Science the Higher and Honours Grade Leaving Certificates of the Scotch Education Department in Latin Greek, and Mathematics, will be accepted as equivalent to the Higher Standard in each of these subjects, as prescribed by the Arts Regulations, and the Lower Grade Certificate to the Lower Standard ; the Higher and Honours Grade Leaving Certificate in English and Modern Languages will be accepted as equivalent to the standard prescribed for each of these subjects by the Arts Regulations.

No Examinations conducted in Scotland, other than those of the Scotch Education Department, will be accepted as equivalent to the Preliminary Examinations in Arts and Science.

3. The Higher Certificate of the Oxford and Cambridge Schools Examinations Board will be accepted as equivalent to the Higher Standard in each subject in the Preliminary Examination in Arts and Science, and their Lower Certificate as equivalent to the Lower Standard.

4. For the Preliminary Examination in Arts and Science, the Deans of the Faculties concerned are empowered to accept, *pro tanto*, such examinations qualifying for entrance to recognised Colonial and Foreign Universities (although not included in the list of Equivalent Examinations issued by the Joint Board) as they consider to be sufficient, but on condition that they afterwards report each case to their respective Senates, and to the Joint Board as soon as possible.

Revised,
31*st January* 1895.

DATES OF ENTERING FOR PRELIMINARY EXAMINATION (FOR ARTS, SCIENCE, LAW, MEDICINE, AND MUSIC) FOR ACADEMIC YEAR (1ST OCTOBER TO 1ST OCTOBER), AND FOR PAYMENT OF FEES.

The Preliminary Examinations in General Education are held in the Examination Hall in the University, in autumn and spring.

Each Candidate is required to pay a fee of 10s. 6d. for each appearance at the Preliminary Examination.

Candidates who intend to present themselves for Examination may obtain Schedules at the Matriculation Office, University (Old) Buildings, which must be completed and lodged and the fees paid at that office, not later than 20th September 1895 and 18th March 1896 for the autumn and spring Examinations respectively.

Candidates who cannot attend personally to pay the fees should transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts. When names are not entered nor fees paid on or before the stated dates, an additional or late entry fee of 10s. must be paid before the Candidate can be admitted to Examination. A Candidate is not held to be entered for the Examination until his Schedule is lodged, the Fee paid, and a Pass to the Examination obtained.

TIME-TABLES FOR PRELIMINARY EXAMINATIONS (FOR ARTS, SCIENCE, LAW (B.L.), MEDICINE, AND MUSIC) AND BURSARY EXAMINATIONS (FOR ARTS AND SCIENCE) FOR 1895-6.

		Medical Preliminary Examinations.	Arts, Science, Law (B.L.), and Music Preliminary Examinations and Bursary Examinations.
1895.			
Sept. 27	Fri.	... ...	Additional English for Bursaries, 9-12[1] Italian, 2-5[1, 4]
,, 28	Sat.	English, 9-11, 12-2 Greek, 3-6 Do., 3-5[2]	English, 9-11, 12-2[1, 3, 4] Lower Greek, 3-6[3, 4]

[1] Papers for the University Ordinary First Year Bursary Examination, for the Heriot University Bursaries both for men and women, and for the Bursaries offered by the Edinburgh Association for the University Education of Women. Candidates for the Heriot Bursaries should apply to the Treasurer of the Trust, 20 York Place, for further information.

[2] For Students under the Old Regulations.

[3] Papers for the Preferential Bursary Examination should there be a Competition.

[4] Papers for Music Preliminary: for Italian for Music Preliminary half-an-hour more will be allowed.

The Papers for the Heriot Bursaries for women studying Medicine and for the St George's Training College Bursaries are the Preliminary Examination Papers pure and simple: candidates for these Bursaries as such do not require to take any of the additional Bursary Papers. Candidates should apply to the Treasurer of George Heriot's Trust, 20 York Place, for further information.

		Medical Preliminary Examinations.	Arts Science, Law (B.L.), and Music Preliminary Examinations and Bursary Examinations.
1895.			
Sept. 30	Mon.	Latin, 9-12 Mathematics, 2-5	Lower Latin, 9-12[3, 4] Lower Mathematics, 2-5[3, 4]
Oct. 1	Tu.	French, 3-6 Do., 3-5[2]	Higher Latin, 9-11, 12-2[1] Latin for Second and Third Year Bursaries, 9-12 French, 1st paper, 3-4.30[1, 4]
,, 2	Wed.	German, 3-6 Do., 3-5[2]	Higher Greek, 9-11, 12-2[1] Greek for Second and Third Year Bursaries, 9-12 German, 1st paper, 3-4.30[1, 4]
,, 3	Thur.	Higher Mathematics, 9-11, 12-1.30[2]	Intermediate and Higher Mathematics and Mathematics, for First, Second, and Third Year Bursaries, 9-11, 12-1.30[1] French, 2nd paper, 3-5[1, 4]
,, 4	Fri.	Moral Philosophy, 9-11[2] Mechanics, 1-4[2]	German, 2nd paper, 9-11[1, 4] Dynamics, 1-4[1] Logic and Psychology for Third Year Bursaries, 1-4
,, 5	Sat.	Natural Philosophy, 9-11[2] Logic, 2-4[2]	Elementary Physics, 9-11[4] Logic, 2-4[4] Additional Latin and Greek for Ordinary Bursaries, 9-12[1] Classics for Second and Third Year Bursaries, 9-12 Additional Mathematics for Ordinary Bursaries, and for Second and Third Year Bursaries, 2-5[1]

[1] Papers for the University Ordinary First Year Bursary Examination, for the Heriot University Bursaries both for men and women, and for the Bursaries offered by the Edinburgh Association for the University Education of Women. Candidates for the Heriot Bursaries should apply to the Treasurer of the Trust, 20 York Place, for further information.

[2] For Students under the Old Regulations.

[3] Papers for the Preferential Bursary Examination should there be a Competition.

[4] Papers for Music Preliminary: for Italian for Music Preliminary half-an-hour more will be allowed.

The Papers for the Heriot University Bursaries for women studying Medicine and for the St George's Training College Bursaries are the Preliminary Examination Papers pure and simple: candidates for these Bursaries as such do not require to take any of the additional Bursary Papers. Candidates should apply to the Treasurer of George Heriot's Trust, 20 York Place, for further information.

		Medical Preliminary Examinations.	Arts, Science, Law (B.L.), and Music Preliminary Examinations and Bursary Examinations.
1895.			
Oct. 7	Mon.	... ...	Higher Geometry for John Welsh Bursaries, and for Kelland Prize, 9-12 Gaelic for Mackinnon Bursary, 9-12
,, 8	Tu.	MEETING OF PRELIMINARY EXAMINERS.	
,, 11	Fri.	MEETING OF JOINT BOARD. } At 10 A.M.	
,, 12	Sat.	MEETING OF JOINT BOARD. } each day.	
,, 15	Tu.	CLASSES OPEN.	
1896.			
Mar. 27	Fri.	... ...	Italian, 2-5[4]
,, 28	Sat.	English, 9-11, 12-2 Greek, 3-6 Do., 3-5[2]	English, 9-11, 12-2[4] Lower Greek, 3-6[4]
,, 30	Mon.	Latin, 9 12 Mathematics, 2-5	Lower Latin, 9-12[4] Lower Mathematics, 2-5[4]
,, 31	Tu.	French, 3-6 Do., 3-5[2]	Higher Latin, 9-11, 12-2 French, 1st paper, 3-4.30[4]
Apr. 1	Wed.	German, 3-6 Do., 3-5[2]	Higher Greek, 9-11, 12-2 German, 1st paper, 3-4.30[4]
,, 2	Thur.	Higher Mathematics, 9-11, 12 1.30[2]	Intermediate and Higher Mathematics, 9-11, 12-1.30 French, 2nd paper, 3-5[4]
,, 3	Fri.	Moral Philosophy, 9-11[2] Mechanics, 1-4[2]	German, 2nd paper, 9-11[4] Dynamics, 1-4
,, 4	Sat.	Natural Philosophy, 9-11[2] Logic, 2-4[2]	Elementary Physics, 9-11[4] Logic, 2-4[4]
,, 7	Tu.	MEETING OF PRELIMINARY EXAMINERS.	
,, 10	Fri.	MEETING OF JOINT BOARD. } At 10 A.M.	
,, 11	Sat.	MEETING OF JOINT BOARD. } each day.	

[2] For Students under the Old Regulations.

[4] Papers for Music Preliminary: for Italian for Music Preliminary half an-hour more will be allowed.

Fees for Degree of M.A.

The Fee for the Degree of Master of Arts (M.A.), with or without Honours, is £5, 5s.

Candidates for the Ordinary Degree pay 15s. for each subject.

Candidates who have paid for subjects for the Ordinary Degree, and who afterwards appear for Honours, pay the balance (if any due) of the £5, 5s.

Candidates who fail to pass in one or more of the subjects of Examination, pay 10s. 6d. for each subject in which they have failed before they can be re-admitted to Examination in that subject.

Dates of Entering for Examinations for Degree of M.A. (Ordinary and with Honours), and for Payment of Fees.[1]

Candidates for Examination may obtain Schedules on application at the Matriculation Office.

Schedules must be lodged, Certificates shown, and Fees paid as follows :—

1. For the Examinations in October 1895, in French and German before 20th September, and in the other subjects *not later than 2nd October.*

2. For the Examinations in Spring of 1896 in Constitutional Law and History, Roman Law, Public Law, and Political Economy, *not later than 9th March.*

3. For the other Spring Examinations the Schedules must be lodged and the Fees paid *not later than 13th March,* and the Matriculation Tickets and Class Certificates must be shown as follows :—For the Examinations in March at least *two clear days before* the date of the Examination in each subject ; for the Examinations in April, *not later than 27th March.*

4. For the Examinations in Chemistry, Zoology, Botany, and Geology in Summer 1896, Schedules must be lodged, Certificates shown, and Fees paid *not later than 10th July.*

When the Candidate has exhibited all the Matriculation

[1] When names are not entered nor fees paid on or before the stated dates, an additional or late entry fee of ten shillings must be paid before the Candidate can be admitted to examination. A Candidate is not held to be entered for the Examination until his Name is entered, the Fee paid, and all the necessary Certificates, &c., lodged.

Tickets and Certificates required for the Examination, the Clerk will stamp on the Receipt for the Fee the words, "Certificates examined," which will entitle the Candidate to admission to the Examination, on producing the Receipt at the Examination Hall.

Candidates who have, in a former year, passed all the Examinations necessary for Graduation, but without having taken the Degree, and who desire to present themselves for Graduation in April 1896, must enter their names and addresses, show their Certificates, and pay the Fees at the *Matriculation Office, at least ten days previously.*

Candidates for Examination or for Graduation must be Matriculated Students of the Academic year in which they appear for Examination or for Graduation.

Every Candidate for Graduation who has passed the Examinations at the end of the Session, immediately before the date of the Graduation Ceremonial, must produce certificates of having passed the necessary Examinations and pay the Fee of £1 for Registration as a Member of the General Council *at least one clear day before the date of Graduation.*

The fees for Matriculation, for Examinations for Degrees, and for Registration of Graduates as Members of the General Council, are payable at the Matriculation Office, University. When Candidates cannot attend personally to pay the fees, they should transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed "*Union Bank of Scotland* (*Hunter Square Branch*), *Edinburgh*," and not by cheques on private accounts.

At the Public Graduation Ceremonial, held annually in April, the Degree of MASTER OF ARTS is conferred by the Chancellor or the Vice-Chancellor of the University, in name of the Senatus Academicus. Degrees are not conferred on any who are not present at the Graduation Ceremonial, and who have not signed the *Sponsio*, although they may have passed all their examinations. Those who are presented to receive the degree must appear in Academic costume, and with the hood proper to the Degree.[1] [2]

[1] Black silk lined with *white*.

[2] Immediately after obtaining the Degree, Candidates should apply for their Diplomas at the Matriculation office. There is no additional charge for the Diploma. Any Graduate who cannot apply personally is required to give written authority to some person to receive and give a receipt for it.

TIME-TABLES FOR M.A. EXAMINATIONS FOR 1895-96.

		M.A. Examinations.	M.A. Honours Examinations.
1895.			
Oct. 1	Tu.	French, 1st paper, 3-5	
,, 2	Wed.	German, 1st paper, 3-5	
,, 3	Th.	French, 2nd paper, 3-5	
,, 4	Fri.	German, 2nd paper, 9-11	
,, 8	Tu.	English, 9-11, 11.30-1.30 Rhetoric and English Literature, &c., for Degrees in Music, 9-11, 11.30-1.30 Latin, 2.30-4.30	
,, 9	Wed.	Latin, 9-11 Greek, 11.30-1.30, 2.30-4.30	
,, 10	Th.	Mathematics, 9-11, 11.30-1.30 Natural Philosophy, 2.30-4.30	
,, 11	Fri.	Natural Philosophy, 9-11 Logic, 11.30-1.30, 2.30-4.30	
,, 12	Sat.	Moral Philosophy, 9-11, 11.30-1.30	
,, 15	Tu.	CLASSES OPEN	
,, 28	Mon.	Constitutional Law & History, 3-5	
,, 29	Tu.	Roman Law, 10-2 Constitutional Law & History, 3-5	
,, 31	Th.	Philosophy of Law, 10-12 Public International Law, 2-4	
1896.			
Mar. 16	Mon.	Constitutional Law & History, 2-4	
,, 17	Tu.	Roman Law, 9-1 Constitutional Law & History, 2-4	
,, 18	Wed.	Political Economy, 9-11, 11.30-1.30	
,, 19	Th.	Philosophy of Law, 9.11 Public International Law, 12-2 Sanskrit, 9-11, 11.30-1.30 Arabic and Syriac, 2.30-4.30	

NOTE.—In the Examinations for the Degree of M.A. in Roman Law, Public Law, and Constitutional Law and History, candidates who intend to proceed later to the Degree of LL.B. must pass on the LL.B. standard.

		M.A. Examinations.	M.A. Honours Examinations.[1]
1896.			
Mar. 21	Sat.	Practical Chemistry (& following days at hours to be announced) Arabic and Syriac, 9-11	
,, 23	Mon.	Chemistry, 10-12 Botany, 1-3	
,, 24	Tu.	Zoology, 10-12 Geology, 1-3	
,, 25	Wed.	Oral Examinations in Science Subjects begin Celtic, 9-11, 11.30-1.30 Hebrew, 2.30-4.30	
,, 26	Th.	Hebrew, 9-11 Astronomy, 11.30-1.30, 2.30-4.30	
,, 27	Fri.	Education, 9-11, 11.30-1.30 Archæology and Art, 3-5	English, 9-12, 2-5 Constitutional History, 9-12, 2-5
,, 28	Sat.	Archæology and Art, 9-11 History, 12-2, 3-5	English, 9-12, 2-5 Constitutional History, 9-12
,, 30	Mon.	English, 9-11, 11.30-1.30 Rhetoric and English Literature, &c., for Degrees in Music, 9-11, 11.30-1.30 Logic, 3-5	English, 9-12, 2-5 Classics, 9-12, 2-5 Modern Languages, 9-12, 2-5 Logic, 9-12, 2-5 Pure Mathematics, 9-12, 2-5 History, 9-12, 2-5
,, 31	Tu.	Latin, 9-11, 11.30-1.30 Logic, 3-5	English, 9-12, 2-5 Classics, 9-12, 2-5 Modern Languages, 9-12, 2-5 Logic, 9-12 Moral Philosophy, 2-5 Pure Mathematics, 9-12 Natural Philosophy, 2-5 History, 9-12, 2-5
Apr. 1	Wed.	Greek, 9-11, 11.30-1.30 Mathematics, 3-5	Classics, 9-12, 2-5 Modern Languages, 9-12, 2-5

[1] The order of the papers set at the particular hours fixed for the general Honours Subjects, within any department or group, may be varied at the discretion of the Examiners. It is impossible to avoid clashing between the hours of Examination in Honours and in Pass Subjects, and Honours Students are warned to make their arrangements accordingly.

			M.A. Examinations.	M.A. Honours Examinations.[1]
1896.				
Apr.	1	Wed.		Moral Philosophy, 9-12, 2-5 Natural Philosophy, 9-12 2-5 History of Art, 9-12, 2-5
,,	2	Th.	Mathematics, 9-11 Moral Philosophy, 11.30-1.30, 3-5	Classics, 9-12 Classics (Optional Subjects), 1-4 Modern Languages, 9-12 History of Art, 9-12
,,	3	Fri.	Natural Philosophy, 9-11, 11.30-1.30	Classics (Optional Subjects), 9-12
,,	4	Sat.	French, 11.30-1.30, 3-5	
,,	6	Mon.	German, 9-11, 11.30-1.30	
,,	8	Wed.	MEETING OF M.A. EXAMINERS FOR OLD SUBJECTS.	
,,	11	Sat.	GRADUATION CEREMONIAL. COMMEMORATION SERVICE.	
July	18	Sat.	Practical Chemistry (& following days at hours to be announced)	
,,	20	Mon.	Chemistry, 10-12 Botany, 1-3	
,,	21	Tu	Natural History, 10-12 Geology, 1-3 Oral Examinations Subjects begin	

PASS EXAMINATIONS FOR MASTER OF ARTS.

The subjects for the Examinations for the Ordinary Degree in October 1895 and April 1896 are as follows :—

I.—DEPARTMENT OF LANGUAGE AND LITERATURE.

1. *Latin.*

Horace, *Satires*, ii.
Vergil, *Eclogues*, *Georgics*, i., ii.
Juvenal, *Satires*, i., iii., iv., v., vii. (Hardy's edition).
Livy, ix.
Tacitus, *Annals*, iv.
Roman History.—A general knowledge of Roman History to the death of Augustus, and a special knowledge of the period from the institution of the Republic to the end of the second Punic War.

[1] See footnote, p. 149.

Roman Literature.—A general knowledge of Roman Literature to the end of the Augustan Age, and a more special knowledge of the Lives and Works of Horace, Vergil, Juvenal, Livy, and Tacitus.

Every Candidate is required to satisfy the Examiners in translating English into Latin prose.

2. *Greek.*

Iliad, xxii.
Euripides, *Herc. Furens.*
Herodotus, Book vii.
Plato, *Republic*, Book vi.
Translation from an Author or Authors not prescribed.
Greek prose composition.
Greek History.—A general knowledge of Greek History to the death of Alexander, and a more special knowledge of the Persian Wars.
Greek Literature.—A general knowledge of the course of Greek Literature, and a special knowledge of the Heroic Age in Greece, as described in the Homeric Poems.
Laws of Hexameter and Iambic verse.

3. *English.*

The Principles of English Composition and Style: Class Lectures.
History of the English Language: The First Five Chapters of Morris's "Historical Outlines of English Accidence."
History of English Literature, more particularly from 1500 to 1688: Lectures, with Morley's Text Book, and the portions of Hallam's "Literature of Europe" that relate to English writers of part of the time mentioned.
Special Readings required:—
Shakespeare's *As You Like It* and *Macbeth.*
Milton's *Sonnets* and *Paradise Regained.*
Tennyson's *Princess* and Browning's *Balaustion, with Transcript from Euripides.*
De Quincey's Essay entitled "*Rhetoric*," and Johnson's *Life of Pope.*
Wordsworth's *Prose Prefaces, &c., to his Poems*, with Book I. of his *Excursion.*

4. *French.*

A. de Musset, *Extraits.*
V. Hugo, *Extraits.*
Emile Faguet, *Dix-Huitième Siècle.*

Pascal, *Pensées* (Ed. Havet).
Clédat, *Morceaux choisis du Moyen-Age.*
V. Hugo, *Les Chatiments.*
Molière, *Les Femmes Savantes.*

Translation from English into French prose is required of every Candidate.

5. *German.*

Nibelungen & Gudrun, ed. Golther (Göschen).
Brant, Sachs, Luther, Fischart, ed. Pariser (Göschen).
Lessing, *Minna von Barnhelm.*
Schiller, *Braut von Messina.*
Goethe, *Wahrheit und Dichtung* (Knabenjahre), Pitt Press.
Sybel, *Eugen von Savoyen*, ed Buchheim.
Riehl, *Culturhistorische Novellen*, Pitt Press.
Passages from German Authors not prescribed.
German prose composition.
A general knowledge of the development of the German Language.
A general knowledge of German History, and of the History of German Literature, with a more minute knowledge of the period 1740-1820.

Translation from English into German prose is required of every Candidate.

6. *Sanskrit and Comparative Philology.*

Hitopadeśa, book i.
Nala, cantos 1-12.
Sanskrit Grammar.
Sanskrit prose composition.
A general knowledge of the course of Sanskrit Literature.

7. *Hebrew and Oriental Languages.*

Hebrew.

1. Questions in Grammar.
2. Translation into Hebrew Prose.
3. Exodus.—Kings, books 1 and 2.
   Micah.
   Psalms, Book i.—Psalms i.-xx.
4. *Jewish History* from B.C. 1010-598.

Syriac.

1. Questions in Grammar.
2. Translation into Syriac Prose.
3. Sections i., iii., ix., xii., xiv. of Rœdiger's *Chrestomathia Syriaca* (Ed. 1892); *Book of Acts* in the Peshitta Version.
4. History of the Syriac Versions of the Scriptures in detail; Wright's *Short History of Syriac Literature*, pp. 1-107.

Arabic.

1. Questions in Grammar.
2. Translation into Arabic Prose.
3. Bruennow's *Chrestomathy of Arabic Prose Pieces*, pp. 1-22, 44-55; *The Kor'an*, Sûra iii.
4. *Arabian History.*—Sir W. Muir's *The Caliphate:* its Rise, Decline, and Fall.—Chapters 1-45 and 64-67.

8. *Celtic.*

Modern Gaelic Scottish and Irish)—Ossian, Fingal, Books i. to iii. inclusive, and M'Intyre's Poems, *or* Keating's Three Shafts of Death.

Old Gaelic.—Fis Adamnáin (Windisch's Irische Texte).

Passages in Old and Modern Gaelic (both Scottish and Irish) from Authors not prescribed.

Translation from English into Gaelic Prose (Scottish *or* Irish).

Modern Gaelic Literature.—A general knowledge of the Literature of Ireland and the Isle of Man, with more detailed knowledge of the Literature of the Scottish Highlands.

II.—Department of Mental Philosophy.

1. *Logic and Psychology.*

The elementary doctrines of Logic and Psychology.

Locke's *Essay*, Book ii., Chapters 1-12, and Chapter 23, along with "*Locke*," in "Philosophical Classics" (Blackwood).

Professor Fraser's "*Selections from Berkeley*"—"Editor's Introduction;" "Principles of Human Knowledge" (sect. 1-84, and 135-156); "Divine Visual Language: A Dialogue."

Hume's *Enquiry concerning Human Understanding.*—Sections 1-7 inclusive.

2. *Moral Philosophy.*

Professor's "Handbook of Moral Philosophy;" Butler "On Human Nature;" Mill's "Utilitarianism;" Sidgwick's "Outlines of the History of Ethics," Chapters ii. and iv.

3. *Commercial and Political Economy.*

The subjects of examination are: The Lectures of the Professor; Mill's *Principles of Political Economy*, Books i.-iii.; Marshall's *Economics of Industry* (*new edition*); Adam Smith's *Wealth of Nations*, Book iv.; Professor Nicholson's *Money and Monetary Problems* (2nd edition), Part I.

4. *Theory, Art, and History of Education.*

Theory and Art.—The subjects of examination are: Lectures of the Professor; *Locke's Thoughts* (the parts which deal with moral training); *Locke on the Conduct of the Understanding: Language and Linguistic Method in the School, by Professor Laurie: Comenius' Great Didactic.*

The Theory or Science of Education comprises the Psychology and Ethics in Laurie's "*Institutes of Education.*"

History.—A general knowledge of Bacon, Ratke, Rousseau, and Pestalozzi.

5. *Philosophy of Law.*

(*See under* "*Public Law.*")

III.—Department of Science.

1. *Mathematics.*

Arithmetic.
Euclid, Books i., ii., iii., iv., vi., and xi., or their equivalent. with their application to Mensuration.
Algebra, Trigonometry, Conic Sections, Geometrical and Analytical.

Candidates must show sufficient knowledge in each of the subjects of examination.

2. *Natural Philosophy.*

Elementary Dynamics.
Astronomy and Experimental Physics.

Candidates must show sufficient knowledge both of Dynamics and of Experimental Physics.

3. *Practical Astronomy.*

The Class Lectures—
Use of the Sextant, Transit-Circle and Ring Micrometer.
Young's General Astronomy; Main's Practical and Spherical Astronomy, or corresponding portions of Brünnow's Astronomy. Sir John Herschel's Outlines of Astronomy, omitting Part IV.

4. *Chemistry.*

Chemical changes as distinguished from physical changes. Elements; compounds; mixtures. Laws of chemical combination by weight and

by volume. The atomic theory. Atoms; molecules. Law of Avogadro. Molecular weights of gaseous and volatile substances. Atomic weights. Law of Dulong and Petit. Chemical Notation—Symbols; formulæ; equations. Simple Chemical calculations.

The non-metallic elements and their chief compounds; especially the compounds of oxygen, of hydrogen, and of chlorine with the other non-metals. The more important inorganic acids. The atmosphere. Combustion. Oxidation and reduction.

The following metallic elements and their chief compounds; especially those with oxygen, with chlorine, and with sulphur: Gold, platinum, silver, mercury, lead, antimony, tin, copper, bismuth, zinc, iron, aluminium, chromium, manganese, barium, strontium, calcium, magnesium, potassium, sodium.

The following salts: the ammonium salts; the more important sulphates, sulphites, thiosulphates, nitrates, nitrites, carbonates, bromides, iodides, iodates, phosphates, borates, silicates.

The relations of bases, acids, and salts. Electrolysis. Quantivalence. The periodic law.

The metallurgy of silver, mercury, copper, lead, tin, zinc, iron. Alloys, such as brass, bronze, solder, type-metal. Amalgams.

The manufacture of aluminium, magnesium, potassium, sodium, glass, porcelain, mortar, gunpowder, sulphuric acid, sodium carbonate and bicarbonate, caustic soda, bleaching powder and chlorates, wrought-iron, steel, white lead.

Classification of Carbon Compounds. Marsh Gas and its Homologues. Chloroform. Methylic and Ethylic Alcohols and Ethers. Substituted ammonias and ammonium salts. Formic and Acetic Acids, Aldehyde, Acetone, Chloral, Olefiant Gas, Oxalic Acid, Lactic Acids. Tartaric Acid, Citric Acid. Fats and Oils, Saponification, Glycerine. Cellulose, Sugars, Starch. Distillation of Wood and of Coal. Benzene, Benzoic Acid, Phenol, Salicylic Acid, Oil of Bitter Almonds. Hydrocyanic Acid, Cyanides, Cyanates, Thiocyanates, Urea, Uric Acid.

Simple Qualitative Analysis. The examination in this is conducted practically. Candidates are required to examine unknown *single salts* for both metallic and salt radicals, as contained in the following lists:—

Silver, Mercurous, Mercuric, Cupric, Lead, Stannous, Stannic, Bismuth, Antimony (*Tartar Emetic* may be given), Arsenious, Zinc, Manganous, Ferrous, Ferric, Chromic, Aluminium, Calcium, Barium, Strontium, Magnesium, Ammonium, Sodium, Potassium.

Carbonate, Sulphite, Thiosulphate, Sulphide, Hypochlorite (Bleaching solution), Nitrite, Chloride, Bromide, Iodide, Cyanide, Sulphate, Chromate, Orthophosphate, Arseniate, Arsenite, Borate, Oxalate, Nitrate, Chlorate, Acetate.

At the examination, Candidates are supplied with the following reagents, &c.:—Acetic Acid, dilute Hydrochloric Acid, dilute Nitric Acid, Sulphuric Acid, dilute Sulphuric Acid, Alcohol, Iodine,

Ammonia, Ammonium Carbonate, Ammonium Chloride, Ammonium Oxalate, Ammonium Sulphide, Barium Nitrate, Bleaching Powder, Calcium Chloride, Calcium Hydrate, Calcium Sulphate, Cobaltous Nitrate, Cupric Sulphate, Ferric Chloride, Ferrous Sulphate, Lead Acetate, Magnesium Sulphate, Mercuric Chloride, Potassium Carbonate, Potassium Chromate, Potassium Ferricyanide, Potassium Ferrocyanide, Potassium Hydrate, Potassium Iodide, Silver Nitrate, Sodium Bitartrate, Sodium Phosphate, Sodium Sulphite, Stannous Chloride, Sulphuretted Hydrogen. *Solids* — Manganese Dioxide, Sodium Carbonate, Borax, Sulphur, Zinc, Copper.

Test-papers :—Blue Litmus, Red Litmus, Plain, Starch, Turmeric.

Bunsen Burner, Test Tubes.

5. *Zoology.*

(*a*) The General Principles of Biology.

(*b*) The distinctive characters of the Invertebrate groups and the structure, habits, &c., of Amœba, Paramœcium, Hydra, Arenicola, Hirudo, Anodon, Helix, Nephrops, and Periplaneta.

(*c*) The distinctive characters of the Chordata groups and the structure, habits, &c., of Myxine, Raia, Clupea, Rana, Columba, Ornithorynchus, Macropus, Lepus, Ovis, and Canis.

(*d*) The skeletons of Crocodilus, Equus, Felis catus, Balæna, Vespertilio, and Simia (Orang).

(*e*) A general knowledge of the orders of Sauropsida and Mammalia.

(*f*) The structure and life-history of Gregarina, Distoma, Tænia, Ascaris, Trichina, and Filaria.

(*g*) The more important facts of the development of Scyllium, Rana, Gallus, and Lepus.

(*h*) The principles of the Geographical Distribution of Animals, and the Distribution of the Mammalia.

In addition to the above subjects, Candidates will require to possess a general knowledge of Wallace's "Darwinism."

6. *Botany.*

The characteristic features of the following groups and classes of the vegetable kingdom :—

Thallophyta [Schizophyta, Algæ, Fungi]; Muscineæ [Hepaticæ, Musci]; Pteridophyta [Filicineæ, Equisetineæ, Lycopodineæ]; Phanerogamæ [Gymnospermæ, Angiospermæ (Monocotyledones, Dicotyledones)].

The fundamental facts and principles of Morphology (including Anatomy, Histology, and Development) and Physiology.

The life-history of the following plants: — Bacterium, Nostoc, Spirogyra, Saccharomyces, Mucor, Vaucheria, Agaricus, Collema, Puccinia, Claviceps, Eurotium, Marchanty, Fucus, Polysiphonia,

Funaria, Aspidium, Equisetum, Selaginella, Pinus, Cycas, Scilla, Capsella, Helianthus, Ulmus, Quercus.

The characters of plants belonging to the chief British natural orders of Phanerogamæ.

7. *Geology including Mineralogy.*

1. *Dynamical Geology.*—The nature and operation of geological agents:—The Atmosphere, Rain, Terrestrial Waters, Ice, the Sea, Plants and Animals, Volcanoes, Movements of the Earth's Crust.

2. *Mineralogy.*—Characters of the more important rock-forming minerals.

3. *Petrology.*—Macroscopic and Microscopic Characters, Composition, Origin and Distribution of the more important Rocks.

4. *Structural Geology.*—Structure of Rock-masses, Bedding, Joints, Cleavage, Foliation, Metamorphism, Faults, Unconformity.

5. *Stratigraphical Geology.*—The History of the Geological Systems of the British Islands.

6. *Palæontological Geology.*—Characters, and distribution in time, of the more important Genera and Orders found fossil in Britain.

7. *Physiographical Geology.*—Origin of the present outlines of the Earth's surface.

IV.—Department of History and Law.

1. *History.*

The Subject of Examination will be, until further notice, General British History, viz.:—(1) History of the British Isles from B.C. 55 to A.D. 1832, in outline; (2) History of the British Isles from 1290 to 1509, in fuller detail; (3) Fortescue's "De Legibus Angliæ" and "Governance of England."

The Examiners will attach greater importance to a grasp of principles than to mere memory work.

For elementary purposes candidates are referred to Gardiner's "Student's History," or to Green's "Short History," or to Bright's "History of England." For the study of the special period the histories of England by Tout (Edward I), Longman (Edward III), Ramsay (Lancaster and York), Gairdner (Richard III and Henry VII), and of Scotland by Burton, may also be consulted.

2. *Archæology and Art* (*History of*).

The subjects for examination will be the Class lectures, the Professor's Manual "The Fine Arts," Conway's "Dawn of Art in the Ancient World," Paris's "Manual of Ancient Sculpture," Parker's "Introduction to Gothic Architecture," Poynter's "Classic and Italian Painting." Candidates will be expected to show some knowledge of the original authorities for the different periods of Art History.

3. *Constitutional Law and History.*

The subjects of examination are the Constitutional Law and History of England, as treated of in the Lectures and in the works of Stubbs, Hallam, and May, and that of the U.S. of America, of France, of Germany, and of Switzerland, as treated of in the Lectures and in the works of Bancroft, Bryce, Adams and Cunningham, Dareste, &c.

4. *Roman Law.*

The subjects of examination are (1) The history of the law from the foundation of Rome to Justinian, and (2) a general knowledge of the principles and doctrines of the Law. Maine's "Ancient Law," and Muirhead's "Historical Introduction," are recommended for the historical part of the examination; and Justinian's Institutes Bk. i. to Bk. iv., Tit. v., must be professed for the doctrinal part.

5. *Public Law.*

I. The Philosophy of Law.

(*a*) The Science of Natural Law; Green, Principles of Political Obligation; Ritchie, Natural Rights; Lorimer, Institutes of Law; Ahrens, Cour de Droit Naturel; Bluntschli, The Theory of the State. (*b*) The Science of Positive Law; The Student's Austin; Holland, Jurisprudence; Sir H. Maine's Works.

II. Public International Law.

Wheaton's "History of the Law of Nations," Nys's "Les Origines du Droit International," Hall's "International Law." *See* Faculty of Law.

EXAMINATIONS FOR GRADUATION IN ARTS WITH HONOURS.

(*Examinations for Honours are held in April only.*)

A.—Classics.

N.B.—It should be understood that a general acquaintance with the Greek and Latin writers of the classical age will be expected from all candidates; and unseen passages from other than the prescribed authors will form an important part of the examination.

The subjects of Examination for the Degree of Master of Arts with Honours in April 1896 and 1897 are as follows :—

1. *Latin for April* 1896.

Plautus, *Captivi*, *Stichus*.
Vergil.
Horace.
Lucan Pharsalia, i., ii.
Cicero, *Letters* (Watson's selection, Parts i., ii., iii.).
Tacitus, *Annals*, xii., xiii., xiv., xv.
Latin prose composition, and translation from Authors not prescribed.
Roman History.—A general knowledge of Roman History to the end of the first century A.D., and a more minute knowledge of the period from 265-146 B.C.

Roman Literature.—A general knowledge of the course of Roman Literature, and a more minute knowledge of the Authors prescribed.

Latin for April 1897.

Plautus, *Stichus*.
Horace.
Lucretius, i., ii.
Juvenal, with omission of ii., vi., ix.
Tacitus, *Histories*, i., ii.
Pliny, *Letters*, ii., iii.

Roman History.—A general knowledge of Roman History to the end of the first century A.D., and a more special knowledge of the period from 146 B.C. to the death of Augustus.

Roman Literature.—A general knowledge of the course of Roman Literature, and a more minute knowledge of the Lives and Writings of the Authors prescribed.

2. *Greek for April* 1896.

Homer, *Iliad* (xiii.-xxiv.).
Aristophanes, *Clouds*, *Wasps*, *Frogs*.
Theocritus.
Plato, *Gorgias* and *Phaedrus* (Thompson's Edition).
Aristotle, *Poetics*, omitting chapters xx. and xxv. (Vahlen's text).
Greek prose composition.
Translation from Authors not prescribed.

Greek History.—A general knowledge of Greek History to the death of Alexander, and a more minute knowledge of the development of the Athenian constitution.

Greek Literature.—A general knowledge of the course of Greek Literature, and a more minute knowledge of the Authors prescribed.

Greek Grammar.—As a special subject, Monro's *Homeric Grammar.*

Greek for April 1897.

Homer, *Odyssey*, i.-xii.
Pindar, *Olympian and Pythian Odes* (Gildersleeve).
Aristotle, *Nic. Ethics*, i.-iv. (inclusive) and x.
Plutarch's *Lives of Pericles, Timoleon, Nicias* (Holden).
Greek Prose Composition.
Translation from Authors not prescribed.

Greek History.—A general knowledge of Greek History to the death of Alexander, and a more minute knowledge of the period embraced by the Athenian supremacy.

Greek Literature.—A general knowledge of the course of Greek Literature, and a more minute knowledge of the Authors prescribed.

Greek Grammar.—As a special subject, Monro's *Homeric Grammar.*

Optional Subjects.

1. *Comparative Philology for April* 1896 *and April* 1897.

Candidates who take Camparative Philology as their optional subject for Graduation with Honours in Classics, will be examined in the following branches of Linguistic Science :—

(*a*) Science of Language, including the history and general results of Linguistic research.

(*b*) Principles of Indo-European Comparative Philology, with special reference to the Greek and Latin Languages.

(*c*) Etymology of Greek and Latin.

Books recommended for private study :—

(*a*) M. Müller, Lectures on the Science of Language.
W. D. Whitney, Language and the Study of Language.
B. Delbrück, Introduction to the Study of Language.

(*b*) V. Henry, Short Comparative Grammar of Greek and Latin (transl. by R. T. Elliott)

Also recommended for reference :—
King & Cookson, Principles of Sound and Inflexion.

Brugmann & Stolz, Greek and Latin Grammar (Iwan Müller's Handbuch der Klassischen Alterthumswissenschaft, vol. ii.).
Blass, Pronunciation of Ancient Greek (Cambridge University Press).

(*c*) Curtius, Principles of Greek Etymology, Book ii.

2. *Classical Archæology for April* 1896.

1. The general history of the Arts of Form in Greece.
To be studied in Overbeck's "Schriftquellen," and Murray's "Handbook of Greek Archæology."

2. The history of Greek Sculpture.
To be studied in Murray's "History of Greek Sculpture," 2nd Ed.

3. A special paper will be set on the styles of different periods of Greek Sculpture.

Classical Archæology for April 1897.

1. The general history of the Arts of Form in Greece.
To be studied in Overbeck's "Schriftquellen," and Murray's "Handbook of Greek Archæology."

2. The history of Greek Sculpture.
To be studied in Murray's "History of Greek Sculpture," 2nd Ed.

3. The types of Greek Coins.
To be studied in Gardner's "The Types of Greek Coins."

Ancient Philosophy for April 1896 *and April* 1897.

The Pre-Socratic Philosophy, with original authorities as quoted in Ritter and Preller.

Books recommended :—Zeller, *Pre-Socratic Philosophy*, vol. i. and ii. (Translation by Alleyne. Longmans, Green & Co.). Burnet, *Early Greek Philosophy* (A. & C. Black).

Plato, *Theætetus*, together with the outlines of the Platonic Philosophy.

or, as an alternative :

Plato, *Philebus*, together with the outlines of the Platonic Philosophy. The Philosophy of Aristotle in its psychological and ethical aspects, with special reference to Aristotle, *De Anima* and *Nicom. Ethics*, Books i.-iv. and x.

B.—Mental Philosophy.

1. *Logic and Metaphysics for April* 1896 *and April* 1897.

The more advanced doctrines of Logic and Psychology.
A competent knowledge of the History of Philosophy.
Plato, *Theætetus.*
Aristotle, *De Anima.*
Spinoza, *Ethics*, Parts i., ii.
Locke, *Essay concerning Human Understanding.*
Berkeley, in Professor Fraser's "*Selections.*"
Hume, *Treatise on Human Nature*, Book i. (Of the Understanding).
Kant, *Critique of Pure Reason.*
Hegel's *Logic* in Professor Wallace's translation, chapters i.-vi.
Lotze's *Metaphysics*, Book i. (Clarendon Press).

2. *Moral Philosophy.*

The Class Lectures for Advanced Students.
Plato's *Protagoras.*
Plato, *Republic.*
Aristotle, *Ethics* (omitting v., vi., vii.).
Spinoza, *Ethics*, Parts iii., iv., v.
Kant, *Groundwork of the Metaphysic of Ethics.*
Hegel's *Philosophy of the State* (Grigg's German Philosophical Classics).
Sidgwick's *Methods of Ethics*, Books iii. and iv.
Green's *Prolegomena of Ethics*, Books ii. and iii.
Herbert Spencer's *Data of Ethics* and *Justice.*

C.—Mathematics and Natural Philosophy.

Pure Geometry, Algebra, Theory of Equations, including Determinants, Trigonometry (Plane and Spherical), Analytical Geometry, Differential and Integral Calculus, Calculus of Finite Differences. (The Candidate may, if he please, profess the Elements of Quaternion Analysis.)

Experimental Physics; Analytical Dynamics and Thermodynamics; *imperative.*

In addition, two or more branches of Elementary Mathematical Physics (such as Geometrical or Physical Optics, Statical or Voltaic Electricity, Capillarity, &c.). These may be selected by the Candidate.

D.—English (Language, Literature, and British History).

Candidates for Honours in English must attend (1) *a.* The Class of Rhetoric and English Literature, and—*b.* The two Honours Half-Courses

in English Literature; and (2) *a.* the half-course in English Language, and—*b.* an Ordinary and an Honours Course, *or* two Honours Courses, in British History.

Subjects for April 1896.

1. *Literature.*

1. Rhetoric and the Principles of Literature.

Knowledge of the following required:—Aristotle's *Rhetoric* and *Poetics;* Quintilian's *Institutes;* Bacon's *Advancement of Learning*, Book II.; Bain's *Composition and Rhetoric;* De Quincey's *Essay on Rhetoric;* Masson's *Essay on Milton's English and Versification* (in Edition of Milton); Guest's *English Rhythms;* Wordsworth's *Prose Prefaces.*

2. History of English Literature.

(1.) *General.—Books recommended:*—Ten Brink's *Early English Literature* (transl. by Kennedy); Stopford Brooke's *Early English Literature;* Ward's *English Dramatic Literature;* Saintsbury's *Elizabethan Literature;* Gosse's *Eighteenth Century Literature;* Ward's *English Poets;* Craik's *English Prose;* Irving's *History of Scottish Poetry.*

(2.) *Special Subject.—Elizabethan Literature.* Candidates are required to show a thorough knowledge of the following books relating to that subject:—Marlowe's *Doctor Faustus* and *Edward II.;* Spenser's *Shepheardes Calender* and *Faerie Queene* (Book I.); Lyly's *Euphues;* Sidney's *Apologie for Poetrie;* Shakespeare's *Tempest*, *Love's Labour's Lost*, *Henry V.*, *Hamlet*, and *Sonnets;* Bacon's *Essays;* Ben Jonson's *Every Man in his Humour* and *Volpone;* Drummond's Poems and *Cypresse Grove; Lyrics from the Elizabethan Song-Books* (ed. Bullen).

Books recommended:—Ward's *English Dramatic Literature;* Dowden's *Shakspere, a Critical Study of his Mind and Art;* Saintsbury's *Elizabethan Literature;* Church's *Spenser* and *Bacon*, and Symonds's *Sidney* and *Ben Jonson.*

Candidates will be required to write a Critical Essay on some subject arising out of Nos. 1 and 2.

2. *Language.*

1. The History of Old and Middle English.

Text-books for reference—Sievers's *Old English Grammar* (ed. Cook) or Sweet's Introduction to the *Old English Reader;* Skeat's *Principles of English Etymology;* Morris's *Historical Outlines of English Accidence;* Kellner's *Historical Outlines of English Syntax.*

2. Special Readings — *The Chronicle*, A.D. 890-1001, in the Parker Text (ed. Plummer); *The Beowulf*, ll. 1251-1887 (Grein, ed. Wülcker, I. pp. 195-219); *The Dream of the Rood*, (Ruthwell and Vercelli Texts); Selections from *The Owl and the Nightingale*, Laurence Minot's verse, and Layamon's *Brut* (Caligula Text), printed in the *Specimens of Early English* (Clar. Press); Chaucer's Prologue to the *Canterbury Tales*; and Gavin Douglas's Prologues to the *Aeneid*.

3. Unseen passages for translation into Modern English.

3. *British History.*

A general knowledge of British History, political and social, and a thorough knowledge of the history of a prescribed period.

For the Books recommended under this head, see under HISTORY.

Subjects for April 1897.

1. *Literature.*

1. Rhetoric and the Principles of Literature.

Knowledge of the following required:—Aristotle's *Rhetoric* and *Poetics*; Quintilian's *Institutes*; Bacon's *Advancement of Learning*, Book II.; Bain's *Composition and Rhetoric*; De Quincey's *Essay on Rhetoric*; Masson's *Essay on Milton's English and Versification* (in Edition of Milton); Guest's *English Rhythms*; Wordsworth's *Prose Prefaces*.

2. History of English Literature.

(1.) *General.—Books recommended:*—Ten Brink's *Early English Literature* (transl. by Kennedy); Stopford Brooke's *Early English Literature*; Ward's *English Dramatic Literature*; Saintsbury's *Elizabethan Literature*; Gosse's *Eighteenth Century Literature*; Ward's *English Poets*; Craik's *English Prose*; Irving's *History of Scottish Poetry*.

(2.) *Special.*—The Literature of the Seventeenth Century. Candidates are required to show thorough knowledge of the following:—Milton's *Poems*, *Areopagitica*, *Of Reformation*, and *Of Education*; George Herbert's *Poems*; Herrick's *Hesperides*; Waller's *Poems*; Denham's *Cooper's Hill*; Cowley's *Pindarique Odes* and *Essays*; Browne's *Urn-Burial*; Butler's *Hudibras*; Marvell's *Satires*; *The Rehearsal*; Dryden's *Indian Emperor*, *Essay of Dramatic Poesy* and *the Defence of the Essay*, *MacFlecknoe*, *Dedication of the Æneïs*.

Candidates will be required to write a Critical Essay on some subject arising out of Nos. 1 and 2.

2. *Language.*

1. The History of Old and Middle English.
   Text-books for reference.—Sievers's *Old English Grammar* (ed. Cook) or Sweet's Introduction to the *Old English Reader*; Skeat's *Principles of English Etymology*; Kellner's *Historical Outlines of English Syntax.*
2. *Special Readings.—Beowulf* (ll. 1-1250); Selections in Sweet's *Anglo-Saxon Reader* and Morris's *Specimens of Early English*, Part I.; Chaucer's *House of Fame*, *Prologue*, and *Monk's*, *Clerk's*, *and Squire's Tales* (Canterbury Tales); Piers Plowman (*Prologue* and first three Passus); Dunbar's *Poems.*
3. Unseen passages for translation into Modern English.

3. *British History.*

A general knowledge of British History, political and social, and a thorough knowledge of the history of a prescribed period.

For the Books recommended under this head, see under HISTORY.

E.—MODERN LANGUAGES AND LITERATURE.

1. *French for April* 1896.

Vie de Saint-Alexis (ed. Gaston, Paris).
Chanson de Roland (ed. Clédat).
Clédat, *Morceaux choisis d'auteurs du Moyen-Age.*
V. Hugo, *La Légende des Siècles.*
Darmesteter et Hatzfeld, *Morceaux choisis du 16me siècle.*
M. de Vogüé, *Remarques sur l'Exposition du Centenaire.*
E. Renan, *Pages Choisies.*
French History—A general knowledge of French History, and a more minute knowledge of the period from 1789 to 1870.
French Literature.—A general knowledge of the history of French Literature, and a special knowledge of the period from 1802 to 1889.
Romance Philology.—The general principles of Romance Philology (Brachet, *Grammaire historique*; Bartsch, *La Littérature française jusqu'au 14me siècle*; Brunot, *Grammaire historique*, 3rd ed.).

French for April 1897.

Clédat, *Morceaux choisis du Moyen-Age.*
Faguet, *Etudes sur le 19me siècle.*
Faguet, *Politique et Moralistes au 19me siècle.*
Lanson, *Histoire de la Littérature française.*
Taine, *Extraits.*
Michelet, *Précis de la Révolution française.*
V. Hugo, *Les Contemplations.*

German for April 1896.

Walther v. d. Vogelweide (ed. Bartsch).
Luther, *Kleinere Prosaschriften.*
Herder, *Kleinere Prosaschriften.*
Goethe, *Iphigenie.*
Schiller, *Wallenstein* (Pitt Press).
Schiller, *Thirty Years' War*, Book iii. (Pitt Press).
Scheffel, *Ekkehard.*
Seidel, *Der Schatz und Anderes* (Liebeskind).
German History.—A general knowledge of German History, and a more minute knowledge of the period from 1700 to 1820.
German Literature.—A general knowledge of the course of German Literature, and a special knowledge of the period from 1740 to 1832 (Scherer, *History of German Literature;* Kluge, *National Litteratur*).
Teutonic Philology.—The general principles of Teutonic Philology, and a more intimate knowledge of Modern German Etymology (Duden, *Etymologie der Neuhochdeutschen Sprache*).

German for April 1897.

Althochdeutsche Litteratur (ed. Schauffler, Göschen).
Liederdichter (ed. Bartsch).
Hans Sachs (ed. Kinzel).
Klopstock, *Oden.*
Lessing, *Nathan der Weise* (Clar. Press).
Lessing, *Hamburgische Dramaturgie.*
Goethe, *Tasso.*
Schiller, *Philosophische Gedichte.*
Storm, *Der Schimmebreiter.*
Stifter, *Der Hochwald.*

F.—History.

Candidates for Honours in History must attend two Classes (one, at least, of which must be an Honours Class) in each of their Honours Subjects. (See Synopses of Courses.)

The Honours subjects at present recognised are (1) Modern History, (2) Constitutional History, and (3) History of Art.

I. Under the head of *Modern History* four papers will be set, viz., two on each of the following subjects:—

(1) General survey of British History, from the earliest period to the present day, with special attention to the period before 1509: some knowledge of the chief original authorities for the period before 1509 will be required.
(2) England and Europe (1815-1878), with special reference to European History: some knowledge of original authorities for the Revolutions of 1830 and 1848 will be required. (Authorities, see pages 118 and 119.)

II. Under the head of *Constitutional History* the three papers will embrace—

(1) *a.* Constitutional History of England, from 1688 to 1832. (Authorities, *inter alia*, the works of Burke, Hallam, Sir T. Erskine May, Anson, and Lecky.)

b. The Constitutions of the U.S. of America, of France, Germany, and Switzerland. (See, *inter alia*, the works of Bancroft, Bryce, and Adams and Cunningham; also Dareste's Constitutions.)

(2) Wycliffe and his Influence on State and Church. (Authorities, *inter alia*, Wycliffe's Works, Lechler's Wycliffe, works of Langland and Chaucer, Wright's "Political Songs," and Loserth's "Wycliffe and Huss.")

(3) The development of the English Monarchy, with special reference to Fortescue's "Governance of England" (ed. by Plummer). (Authorities, the Standard Constitutional Histories.)

The Candidate must show some familiarity with the original sources (in Latin, French, Old English, &c.).

III. Under the head of *History of Art* the three papers will embrace—

(1) The Class Lectures; the Professor's Manual "The Fine Arts"; Conway's "Dawn of Art in the Ancient World"; Woltmann's "History of Painting," Vols. I. and II.; select passages bearing on Ancient Art from Overbeck's "Schriftquellen"; portions of Theophilus' "Schedula Diversarum Artium"; selected lives from Vasari's "Lives of the Italian Artists"; Lady Dilke's "Art in the Modern State."

(2) Classical Archæology, to be studied in Overbeck's "Schriftquellen" (a collection of passages from ancient authors bearing on Classical Art); Murray's "Handbook of Greek Archæology"; Murray's "History of Greek Sculpture," 2nd. ed. (London: John Murray.)

Questions will also be set in the special subject for the examination in Classical Archæology in April 1896, being "the critical discrimination of successive styles in the works of Greek Sculptors." This subject may also be studied in Brunn's "Geschichte der griechischen Künstler," Overbeck's "Geschichte der griechischen Plastik," 4th ed., &c.

The questions in Classical Archæology will be the same as those set in this subject for Honours in Classics (see p. 161), and the examination will be at the same time.

B.—REGULATIONS OF THE UNIVERSITY OF EDINBURGH RELATIVE TO THE DEGREE OF MASTER OF ARTS (M.A.), APPLICABLE TO ALL WHO HAD ENTERED ON THEIR ACADEMICAL COURSE BEFORE 1ST OCTOBER 1892.[1]

The Degree of Master of Arts admits to the General Council of the University, to professional Study for the Learned Professions, to the Army, &c. Under recent regulations, framed in virtue of the Education Act (1872), *the Degree qualifies for Masterships of Public Schools, subject to an examination in the methods of instruction, and three months' attendance in a Public School for the practice of teaching.*

I. The ordinary Course of Study necessary for the Degree of Master of Arts (except in the circumstances mentioned in the following Article) extends over FOUR WINTER SESSIONS, and includes attendance for *not less than two Sessions* on the Classes of Humanity (Latin), Greek, and Mathematics respectively; attendance for not less than one Session on the Classes of Logic and Metaphysics, Moral Philosophy, and Natural Philosophy respectively; and also attendance on the Class of Rhetoric and English Literature.

II. Any Student who, at the time of his Entrance to the University shall satisfy the Professors of the Faculty of Arts, on Examination, that he is qualified to attend the Higher Classes of Latin, Greek, or Mathematics, or any one of them, may be admitted to such Higher Class or Classes without having previously attended the Junior Class or Classes in the same department. When a Student has been thus considered by the Faculty of Arts to be qualified for admission to the Higher Classes both of LATIN and GREEK, without having previously attended the First or Junior Latin and Greek Classes, his Course of Study for the Degree of Master of Arts may be completed within THREE WINTER SESSIONS, instead of Four. And no Student who is thus qualified for admission to the Higher Class of LATIN and GREEK, or of MATHEMATICS, without having previously attended the First or Junior Class in the same department, is required to give attendance in Latin, Greek, or Mathematics respectively, for more than *one* Session, as a necessary part of the Course of Study for the Degree of Master of Arts.

III. In pursuing the Course of Study for the Degree of Master of Arts, no Student is permitted to pass from the Junior to the Higher Class, unless the Professor is satisfied of his fitness to enter the Higher Class.

[1] The annual amount of Matriculation, Class Fees, &c., of the regular course in Arts may be estimated at about £10, 10s.

IV. It is in the power of any Student, who has given attendance during one or more Sessions in any Scottish University, to complete his Course of Study, by giving attendance in the University of Edinburgh during the remaining Sessions of his Course; provided always that every such Student gives attendance in the University of *Edinburgh* during, at least, the *last Two Sessions* of his Course; and provided also that he produces, to the satisfaction of the Faculty of Arts of the University of Edinburgh, Class Certificates of his attendance at the former Scottish University—but he must be examined in all the three Departments necessary for the Degree of Master of Arts by the Examiners of the University of Edinburgh.

V. Candidates for the Degree of Master of Arts must be examined on all the subjects of instruction embraced in the above Course of Academical Study; and the examinations may be conducted wholly in writing or partly *viva voce*.

VI. Any Student who has completed his attendance on the Classes of

LATIN AND GREEK,

required in the prescribed Course of Study, may be examined on these Subjects, at any Examination for Degrees, although he may not have completed his attendance on the other Classes of the prescribed Course.

In like manner, any Student who has completed his attendance on the Classes of

LOGIC AND METAPHYSICS, MORAL PHILOSOPHY, AND RHETORIC AND ENGLISH LITERATURE,

may be examined on these Subjects, at any Examination for Degrees, although he may not have completed his attendance on the other Classes of the prescribed Course.

Also in like manner, any Student who has completed the attendance required in the prescribed Course of Study on the Classes of

MATHEMATICS AND NATURAL PHILOSOPHY,

may be examined on these subjects at any Examination for Degrees, although he may not have completed his attendance on the other Classes of the prescribed Course.

And if such Student shall satisfy the Examiners, when so examined, in the Department of CLASSICAL LITERATURE, which comprehends Latin and Greek—or in the Department of PHILOSOPHY, which comprehends Logic and Metaphysics, Moral

Philosophy, and Rhetoric and English Literature—or in the Department of MATHEMATICS and PHYSICS, which comprehends pure Mathematics and Natural Philosophy, he shall receive from them a CERTIFICATE to that effect, and he shall not be examined again in the same Department, as a condition of his taking the Degree of Master of Arts.

The papers for the Examinations under the old Regulations are the same as those in the corresponding subjects for the Degree of M.A. under the new Regulations, and take place at the same time.

Names must be entered, Certificates shown, and Fees paid on or before 2nd October 1895, and on or before 13th March 1896 for the Examinations in Autumn 1895 and Spring 1896 respectively.[1]

The Examination fee for the Degree of Master of Arts (with or without Honours) is *Three Guineas*, or *One Guinea* for each of the three Departments.

GRADUATION IN ARTS WITH HONOURS.

I. Students who have passed the Examinations in the three Departments embraced in the Course of Study prescribed for the Degree of Master of Arts, may, before taking the Degree, offer themselves for a further examination, with a view to Graduation with Honours; and that either in the same year in which they have completed the Pass or Ordinary Examinations, or in a future year. Also, any Student who desires to offer himself for Examination with a view to graduation with Honours, in any one or more departments, may proceed to such Honours Examination, after sufficient attendance on the classes in the department or departments in which he desires to offer himself, without having previously passed the Examination in such department or departments for the Degree of Master of Arts without Honours; and if such Student, in the opinion of the Examiners, fails to attain the standard for Honours in any department, but attains to the standard of the Examination for graduation without Honours, he shall be held to have passed in that Department for the Degree of Master of Arts, without Honours; but if, in any such department, he fails to attain to the standard of the Examination for graduation without Honours he shall not be entitled, until he shall have passed in that department, to the Degree of Master of Arts. And no person,

[1] See footnote, page 146.

without the permission of the Senatus Academicus, can be admitted to an Examination for *Honours*, after he has ceased, for more than one Winter Session, to be a Matriculated Student, in attendance on a class or classes in the University.

II. There are four departments for Graduation in Arts with Honours, in any one or more of which, subject to the preceding Regulation, Students may present themselves for further Examination, viz.:—

A. CLASSICAL LITERATURE, .	Latin. Greek.
B. PHILOSOPHY, . . .	Logic. Metaphysics. Moral Philosophy.
C. MATHEMATICS AND PHYSICS,	Pure Mathematics. Natural Philosophy.
D. NATURAL SCIENCE, . .	Geology. Zoology. Chemistry. Botany.

III. In each of the first three of the above-mentioned departments, viz., in Classical Literature, in Philosophy, and in Mathematics, there are *two* Grades of Honour, each representing, as nearly as possible, a uniform standard of qualification, and denominated respectively the FIRST CLASS and the SECOND CLASS.

The papers for the Examinations are the same as those in the corresponding subjects for the Degree of Master of Arts with Honours under the new Regulations, and the Examinations take place at the same time.

IV. In the department of Natural Science, there is only *one* class of Honours, and the examinations are held at the same time as in the corresponding subjects in the Final Examination in Pure Science.

Candidates may select any Two of the above Subjects, in which they will be subjected to examinations equivalent to those in the same subjects for the Final Examination for Bachelor of Science.

Candidates for Honours must enter their names and pay the fees on or before 13th March 1896.[1]

No one who has ceased for more than one Winter Session to be a Matriculated Student in attendance on a class or classes in the University can be admitted to an Examination for *Honours* without permission of the Senatus Academicus.

G. CHRYSTAL, LL.D.,
Dean of the Faculty of Arts, and Professor of Mathematics.

[1] See footnote, page 146.

SPONSIO ACADEMICA TO BE SIGNED BY GRADUATES IN ARTS.

Nos qui Nomina subsignamus Magisterii titulo jamjam donandi Spondemus nos in omni debitae gratitudinis officio erga Universitatem Academicam Edinburgensem ad extremum vitae halitum perseveraturos.

GRADUATES IN ARTS.

HONOUR LISTS—1889-1895 *inclusively.*

The names of all Graduates in Arts with Honours previously to 1889 will be found in the List of Graduates of the University published in 1889.

The contractions Class., Phil., Math., Engl., and Nat. Sc., indicate the Departments or Groups of Classics, Mental Philosophy, Mathematics and Natural Philosophy, English, and Natural Science, respectively; and the Italic Numerals, i. and ii., indicate First and Second Class Honours respectively.

1889.

Class. i., Patrick Duncan, Harry Angus Alexander Kennedy, Thomas Ross Mills, Jas. Cruickshank Smith, John Tennant.

Class. ii., Robert Alex. Falconer, Alexander Harris Hutt.

Phil. i., Charles Mackinnon Douglas, William George Smith.

Phil. ii., David Walton Vaughan.

Math. i., James Ireland Craig, William Andrew Knowles, Jas. Fairbairn M'Kean.

Nat. Sc., Alexander Bremner, John Brown Clark, David Davidson, John Melvin Lowson, Robert Stewart M'Dougall, John Machray, John Hally Meikle, Harry Fisher Menzies, Alexander Gordon Wallace, John Young.

1890.

Class. i., John Maclennan, James Watt.

Class. ii., William Brereton Dennison, William Barron Stevenson.

Phil. i., Andrew Nisbet Bogle, Duncan Mackenzie, Thomas Dixon Rutherford, James Stewart.

Phil. ii., Henry Reynolds Brown, William Elmslie Wilkie Brown Dempster, Arthur Herbert Gray, Walter Hardie.

Math. i., Charles Tweedie.

Nat. Sc., James Adamson, William Lewis Martin, John Myles, Andrew Robertson Wilson.

1891.

Class. ii., John Adam Norrie, William Gibson Wedderspoon.

Phil. i., Henry Barker, John Davidson, Walter Charles Murray.

Phil. ii., Alexander Grieve, Wm. Allan Neilson, Alexander Joseph Pearse.

Math. i., John Forbes, Adam Mitchell Hunter, William Edward Philip, William Leslie Thomson, John Turner.

Nat. Sc., Robert Pollok, James Rodger Watson.

1892.

Class. ii., Peter Campbell, William Gracie, Hugh Ross Mackintosh.
Phil. i., Hugh Ross Mackintosh.
Phil. ii., Thomas Linton, William Joseph Pennell.
Math. i., James Mitchell.
Math. ii., Alexander Campbell Mackay.
Nat. Sc., John Smith Flett.

1893.

Class. i., Robert Gordon McKerron.
Class. ii., Walter Robertson Henderson, Hugh Lugton Jackson, Robert Montgomerie Samson.
Phil. i., Alexander Beith Macaulay, Hugh Pattison Macmillan, Lilias Maitland.
Phil. ii., William John Collier, Sydney Smith, William Finlayson Trotter.
Math. i., Neil Macmichael.
Math. ii., George Lowe Moffat, Frank Spence, Thomas Wilkie Wilson, James Wood.
Nat. Sc., Frank Spence, William White Taylor, William Watson.

1894.

Class i., George Liddell, James Middleton Moore, Robt. Lindsay Ross.
Phil i., James Black Baillie.
Math. i., Alexander George Burgess, John Watt Butters, Henry Herd, John Alexander Johnston.
Math. ii., Thomas Cleghorn Baillie.
Nat. Sc., John Watt Butters.

1895.

Class. i., Francis Dewar, William John Keith, Alexander Buchanan Macdonald, William Wallace M'Kechnie, Alfred Croom Paterson.
Class. ii., George Duncan Low, Peter M'Gregor, James MacKenna.
Phil. i., John Macaskill.
Phil. ii., James Bonnar Russell, Robert Whyte.
Math. i., John Forbes Cameron, Hugh Archibald Jamieson, James Alexander Macdonald, Thomas William Pickles.
Math. ii., Robert Candlish Melville Bell.
Engl. i., David Nichol Smith.

ORDINARY DEGREE OF MASTER OF ARTS.

1st August 1894.

David Lowe Guild.
David Mathers Smart.
Robert John Thom Wright.

27th October.

Archibald Cowan.
Alfred Cowper.
Donald Urquhart Crerar.
Frederick Alexander Georgeson.
Samuel Gray.
Robert George Jamieson.
James Black Penman.
Charles Heron Watson.

17th April 1895.

Aitken, David Macrae.
Baird, Alexander James.
Barron, Jessie.
Baxter, William Cook.
5 Bell, Mary Stuart Melville.
Branford, Benchara Bertrand Patrick.
Brown, John.

Bruce, Robert Alexander.
Campbell, Malcolm.
Craig, James.
Cuthbert, James Cooper.
Dallas, Alastair.
Davison, Sarah Wilson.
Drummond, Margaret.
Easson, Alexander.
Ewart, John.
Findlay, Charles Stewart.
Fraser, Charles.
Garrett, Elizabeth Walker.
Garvie, James Beatson.
Gilbert, Alexander Dorward.
Graham, John Keddie.
Grant, John.
Hamilton, William Hugh.
Holdsworth, William Henry.
Hunter, Andrew.
Kerr, William.
Lamb, John.
Lauchlan, Charles Jenner.
Lawson, David Barnett.
Lees, John Carr.
M'Clymont, William.
M'Donald, Charles.
Macdonald, John Angus.
Macgillivray, George John.
Macgregor, Charles Thompson
Mackenzie, Thomas James.
Mack, John Charles.
Martin, Donald.
Melrose-Macmillan, John.
Milligan, Samuel.
Miln, Robert Lyon.
Moffat, Robert Maxwell.
Moncrieff, Hope.
Moncrieff, William.
Muir, John.
Murdoch, John Pryde.
Neilson, David.
Ogilvy, William.
Pankhurst, Percy.
Paul, William Moncreiff.
Robb, John.
Robertson, Charles.
Robertson, Jeannie Wark.
Robertson, John Watson.
Robinson, Henry Wheeler.
Ross, Donald George.
Ross, Harry James Gray.
Rowe, Robert Morison.
Sanderson, Samuel Sommerville.
Sellar, William Harper.
Skinner, William Cumming.
Smith, James Galbraith.
Smith, Mabel Margaret.
Smith, William.
Sprague, Henry Douglas.
Stuart, Charles Edward.
Tweedie, David Jackson.
Watson, David.
Watson, William Brown.
Webster, William Lawrie.
Wilson, Allan Aitchison.
Yeoman, Alexander Ross.
Young, Andrew.
Young, Frank.

REGULATIONS FOR SCHOOLMASTER'S DIPLOMA.

1. Candidates for the Schoolmaster's Diploma must be graduates in Arts of a Scottish, English, or Irish University, or of some other University approved of by the Senatus and the University Court.

2. Each Candidate must have matriculated in the University for the year in which he presents himself for the Diploma.

3. Each Candidate must have attended the Class of the Theory, Art, and History of Education in the University.

4. Each Candidate must pass an Examination in the Theory, Art, and History of Education, to be conducted by the Professor of that subject, and an Examiner appointed by the University Court.

5. The subjects of Examination are announced annually in the *University Calendar*.

6. Each Candidate must give evidence either—

(*a*.) That he has attended a Course of Practical Instruction as a Queen's Scholar in a Training College for Teachers; *or*

(*b*.) That he has gone through a complete course of Practical training in a Training College for Teachers—the Course to extend over not less than five months, and to include Demonstration and Criticism Lessons.

7. Each Candidate must further satisfy the University of his practical aptitude as a Teacher by teaching a class in some special Subject or Subjects in which he has received instruction in the University, or in any Institution recognised by the University as qualifying for Degrees.

8. Each successful Candidate will receive a Diploma signed by the Vice-Chancellor of the University, or, in his absence, by the Principal or the Senior Professor. The Diploma will be delivered at a public meeting for conferring Degrees.

9. This Diploma is of two grades: (*a*) Secondary School Diploma, for Masters of Arts with Honours in any Department, testifying to their fitness for Secondary Schoolmasterships, and will state the Special Subjects in which the holder of the Diploma is qualified; (*b*) General Diploma, for those who have taken the ordinary Degree of M.A.

10. The Fee for the Diploma is £2, 2s.

The next Examination will begin on Friday, 27th March 1896, at 9 o'clock, and Candidates are required to enter their names and pay the Fee at the *Matriculation Office* on or before 13th March.

The subjects are the same as for Graduation (which see, page 154), but the Standard of Pass is much higher, *with the addition* of Milton's "Tractate"; Quintilian's "Institutions," Books I. and II.; and "The History of Education, Hellenic and Roman," as in the "Historical Survey of Pre-Christian Education, by the Professor; and the General Outlines of History, as in Quick's "Biographies," down to 1700.

A short Thesis will be prescribed to be written in the Examination Room on an Educational subject.

The Diploma has been conferred on the following Candidates:—

A.—General Diploma and Diploma for Secondary Schools.

1890—Robert Stewart M'Dougall.
1891 Wm. Brereton Dennison, M.A.; Wm Allan Neilson, M.A.

1892—John Edgar, B.A. (Oxon.).
1893—Arthur Wynne Shaw, B.A. (Yale); Albert Zoutmann, M.A. (Edin.); Alexander Wilmer Duff, M.A.
1894—Stewart Alan Robertson, M.A. (Edin.)
1895—James Bremner, M.A.; John Brown Hamilton, M.A. (Glasg.); Alexander Morgan, M.A., B.Sc.; Frank Spence, M.A., B.Sc.

B.—General Diploma.

1888—D. Bogie, M.A.; J. S. Lawson, M.A.; C. H. Owen, M.A.
1889—Donald Brims, M.A.; Charles Smith, M.A.
1891—E. W. Hobbs, M.A.; D. M'Gregor, M.A.; E. Mitchell, M.A.
1892—Frederick Samuel Davies, B.A. (Lond.); John Brown Hamilton, M.A., B.D. (Glasg.); Thomas Miller Henry, M.A. (Edin.); James Livingston Linton, M.A. (Edin.); Edward Wilson, M.A. (Edin.).
1893—John Stevenson, M.A.
1895—James Andrew Craig, M.A. (Edin.); Elizabeth Walker Garrett, M.A. (Edin.).

REGULATIONS FOR CERTIFICATE OF "LITERATE IN ARTS." (L.A.)

The following are the Regulations for this Certificate :—

1. The Certificate is open to persons who have passed the Preliminary Examination, and who have subsequently attended for two Winter or one Winter and two Summer Sessions the usual qualifying courses of instruction in the Faculty of Arts in subjects in which they wish to qualify.

2. The number of subjects of examination shall be four, and the standard of examination shall be the Graduation standard.

3. Of the subjects selected, two shall be from two of the groups mentioned in Section VII. (2) of the Arts Regulations and the others may be any two mentioned in the Arts Regulations, with the addition of Music and Agriculture (the latter including a practical examination).

4. The fee for the Certificate of Literate in Arts is two guineas, or ten shillings and sixpence for each subject.

5. Candidates must be matriculated Students for the year in which they appear for examination.

The next Examination on Music will take place on 30th March 1896 from 9 to 12 o'clock, and in Agriculture in March 1896, at the same time as the Examination in that subject for the Degree of B.Sc.

Candidates who select Music as a subject will be examined on the Elements of Music (Notation, Measure, Scales, Modes, *Temps*, Forms, &c.); the Class Lectures, and the Professor's "Dictionary of Musical Terms, to which is prefaced an Introduction to the Elements of Music."

Harmony, its Theory and Practice; the Class Lectures, and Richter's "Treatise on Harmony."

History of Music, more particularly from Handel and Bach to the present time; the Class Lectures, Rockstro's "A General History of Music," and Riemann's "Catechism of Musical History" (Part II.: "History of Musical Forms").

Candidates who select Agriculture and Rural Economy will be examined on the Lectures of the Professor and the Saturday field excursions; Practical Laboratory work, to the extent involved by the use of the Laboratory Guide, "The Food of Plants," by A. P. Laurie, M.A., published by Macmillan & Co.; Wallace's "Farm Live Stock of Great Britain," 1893 edition—Crosby, Lockwood & Son; Fream's "Soils and their Properties"—Bell.

The names of Candidates must be given in, Certificates shown, and Fees paid for the Examinations in Autumn 1895, not later than 2nd October, and in Spring 1896 not later than 13th March.

The Certificate was conferred on the following Candidates in 1894-95:—

Percy Pankhurst.
Roderick Morison.
William Cumming Skinner.
Charles Fraser.
Norman Campbell.
John B. Robson.

Competitive Examinations for Bursaries in Arts.

HONOURS LIST.

October 1894.

I.—Students Entering First Session.

A. GENERAL BURSARY LIST.

(*Subjects of Examination*—English, Latin, Greek, and Mathematics, all on the Higher Standard, with additional papers in each subject.)

In future Examinations Candidates may select not more than five of the Preliminary Examination subjects.

1. William Dunbar, George Watson's College.
2. Arthur B. Keith, Royal High School.
3. Donald Banks, George Watson's College.
4. Alexander Flint, George Watson's College. } Equal.
5. William Dick, George Watson's College. }
6. David L. Norrie, George Watson's College.
7. S. A. K. Wilson, George Watson's College.
8. D. H. M'Gregor, George Watson's College.
9. John Adam Gray, George Watson's College. } Equal
10. William Porter, George Watson's College. }
11. Victor Caldwell, Methodist College, Belfast. } Equal.
12. Herbert Smiles, George Watson's College. }
13. J. H. Cattanach, George Watson's College.
14. A. M. Anderson, Daniel Stewart's College.
15. Alexander Sutherland, Daniel Stewart's College.
16. J. S. Wilson, George Watson's College.
17. Donald J. Boyd, George Watson's Colleget } Equal.
18. James M. Dunnett, Kilmarnock Academy. }
19. John Alexander Gray, George Watson's College.
20. D. Robertson, Stranraer Academy
21. James M. Low, George Watson's College.
22. A. F. Black, Fettes College.
23. J. A. Davidson, George Watson's College.
24. A. J. Forrest, Royal High School.
25. H. Robertson, Daniel Stewart's College. } Equal.
26. D. T. Stewart, George Watson's College. }
27. John Ross, Royal High School.
28. A. R. M'Gregor, George Watson's College.
29. W. C. A. Ross, Fettes College.
30. H. C. Duncan, Merchiston Castle.
37. John Millar, Ayr Academy.
32. J. K. M'Gregor, Daniel Stewart's College.
33. H. C. Miller, Fettes College.
34. W. M. Maclachlan, Ayr Academy.
35. C. A. Soutar, High School, Arbroath. } Equal.
36. Wm. M. Henderson, Royal High School. }
37. George Henderson, Ayr Academy. } Equal.
38. A. S. Crichton, High School, Arbroath. }

B. GEORGE HERIOT BURSARIES (MEN).

(*Subjects*—1. Latin ; 2. Elementary Mathematics ; 3. English, and any two of the following :—4. Greek ; 5. French and German ; or 6. Higher Geometry.

1. D. H. M'Gregor, George Watson's College.
2. Alexander Flint, George Watson's College.
3. John Adam Gray, George Watson's College.
4. James M. Low, George Watson's College.
5. Alex. Sutherland, Daniel Stewart's College.
6. James M. Dunnett, Kilmarnock Academy.
7. James S. Wilson, George Watson's College.
8. Donald J. Boyd, George Watson's College,
9. John Alex. Gray, George Watson's College.

C. GEORGE HERIOT BURSARIES (WOMEN).

(*Subjects*—1. Latin ; 2. Elementary Mathematics ; 3. English ; and any two of the following :—4. Greek ; 5. French ; 6. German ; or 7. Higher Geometry.

Jeannie C. Thomson.
Isabella M. Ogilvie.
Jessie A. M'Kechnie.
Jane M. Symington.
Jane D. Love.
Janet B. Imrie.
Annie Macdonald.
Amy Thomson.
Amy P. Smith-Shand.
Anne J. Bisset.
Grace F. Matthew.
Euphemia W. Menzies.
Isabella C. Black.

D. WELSH CLASSICAL BURSARIES.

(*Subjects of Examination*—English, Latin, and Greek, as for General Bursaries.)

1. David L. Norrie, George Watson's College.
2. William Dunbar, George Watson's College.
3. Arthur B. Keith, Royal High School.
4. Alexander Flint, George Watson's College.
5. B. H. Richardson, George Watson's College.
6. Victor Caldwell, Methodist College, Belfast.
7. J. H. Cattanach, George Watson's College, } Equal.
8. John Adam Gray, George Watson's College, }
9. Donald Banks, George Watson's College, } Equal.
10. S. A. K. Wilson, George Watson's College, }
11. William Porter, George Watson's College.
12. Herbert Smiles, George Watson's College.

E. WELSH MATHEMATICAL BURSARIES.

(*Subjects of Examination*—Mathematics, especially Pure Geometry.)

1. James M. Low, George Watson's College.
2. William Dick, George Watson's College.
3. D. H. M'Gregor, George Watson's College. } Equal.
4. Donald Banks, George Watson's College. }
5. James M. Dunnett, Kilmarnock Academy.
6. Alex. Sutherland, Daniel Stewart's College.
7. Alex. Flint, George Watson's College.
8. John Adam Gray, George Watson's College.
9. Andrew M. Anderson, Daniel Stewart's College.

II.—Second Year Bursaries.

(*Subjects of Examination*—Latin, Greek, and Mathematics.)

T. S. Macpherson.
W. A. Curtis.

Alexander Brown.
James Lornie.

III.—Third Year Bursaries.

(*Subjects of Examination*—Classics, Mathematics, and Logic, with Psychology, and also Gaelic for Macpherson Bursary.)

Alexander M'Gregor.
Don. A. Macnaughton.

Marshall N. G. Gray.
George Maclennan.

IV.—Kelland Prize.

(*Subjects of Examination*—Mathematics, especially Higher Geometry.)

H. Wilkie.

D. Robertson, } *Proxime*
J. B. Meiklejohn, } *Accesserunt.*

V.—Patterson Bursary in Anglo-Saxon.

David Nichol Smith.

Class Prize and Honour Lists.

SUMMER SESSION, 1894.

HUMANITY.

HONOURS CLASS—HONOURS GRADUATION HALF-COURSE.

Prizes and First-Class Certificates of Merit.—(*a*) For Class Work.—1. W. Cuthbert Morton, Trinidad. (*b*) For Examinations on Unprepared Work. 1. William D. Ross, Edinburgh; 2. W. Cuthbert Morton, Trinidad; 3. Peter Thomsen, Leith; 4. Donald A. Macnaughton, Edinburgh; 5. John Lees, Edinburgh. (*c*) For Latin Prose Composition.—1. Peter Thomsen, Leith; 2. William D. Ross, Edinburgh; 3. Donald A. Macnaughton, Edinburgh.

Second-Class Certificate of Merit.—Charles S. Findlay, Caithness.

SENIOR CLASS—PASS GRADUATION HALF-COURSE.

Prizes and First-Class Certificates of Merit.—1. Lilian C. Graham, Edinburgh (*Medal*); 2. James C. Leighton, Dundee; 3. Charlotte Tweedie, Berwickshire; 4. Charles H. Moore, Edinburgh.

SECOND-CLASS CERTIFICATES OF MERIT.—5. John Ewart, Edinburgh; 6. W. H. Smith, Edinburgh; 7. Edith Graham, Edinburgh; 8. Alice Paterson, Edinburgh; 9. Wilhelmina Kerr, Edinburgh; 10. Louisa R. Boyd, Edinburgh; 11. Alexander Darrock, Edinburgh; 12. James Reid, Edinburgh; 13. George E. Marjoribanks, Prestonkirk.

LATIN PROSE COMPOSITION.

PRIZE.—1. James C. Leighton, Dundee.

HONOURABLE MENTION.—2. George E. Marjoribanks, Prestonkirk; 3. Lilian C. Graham, Edinburgh; 4. Charlotte Tweedie, Berwickshire.

JUNIOR CLASS—PRELIMINARY COURSE.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. Rosa Stoltz, Liberton; 2. Helen Cameron, Edinburgh; 3. E. B. Jamieson, Edinburgh; 4. Emily M. Milligan, Edinburgh; 5. Sarah W. Davison, Newcastle-on-Tyne; and Robert V. Clark, Edinburgh —equal.

SECOND-CLASS CERTIFICATES OF MERIT.—7. Robert Hendry, Edinburgh; 8. Catherine G. Lowson, Trinity; 9. Bessie B. Bird, Berwick-on-Tweed; 10. Nettie R. Duncan, Kinross; 11. Alexander R. Cook, Edinburgh; 12. Isobel B. Mason, Dalmeny; 13. Grace F. Matthew, Corstorphine; and William A. Mowat, London —equal.

LATIN PROSE COMPOSITION.

HONOURABLE MENTION.—1. Sarah W. Davison and E. B. Jamieson —equal; 3. Rosa G. C. Stoltz; 4. Helen Cameron and Emily M. Milligan —equal; 6. Annie Macdonald; 7. Samuel G. Kerr, Robert V. Clark, J. C. Blackwell Irons, and Alexander R. Cook —equal.

FRANCIS R. JAMIESON, M.A., *Lecturer.*

GREEK.

HONOURS CLASS—HONOURS GRADUATION HALF-COURSE.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. Jessie Muir Hawick; 2. T. B. M. Lamb, Cumberland.

SECOND-CLASS CERTIFICATES OF MERIT.—3. John Lees, Ayr; 4. Alfred G. Hogg, Edinburgh.

SENIOR CLASS—PASS GRADUATION HALF-COURSE.

PRIZE AND FIRST-CLASS CERTIFICATE OF MERIT.—1. Wm. Henry Smith, Edinburgh.

SECOND-CLASS CERTIFICATES OF MERIT.—2. John Ewart, Dalbeattie; 3. Charles H. Moore, Edinburgh.
HISTORY AND LITERATURE PRIZE.—John Ewart.

JUNIOR CLASS—PRELIMINARY COURSE.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. G. Dundas Craig, Dundee, and Frances H. Melville, Edinburgh—equal; 3. Wm. G. Brown, Penicuik.
SECOND-CLASS CERTIFICATES OF MERIT.—4. Jessie Barron, Edinburgh; 5. Evan Macmillan, Edinburgh.

A. DOUGLAS THOMSON, M.A., *Lecturer.*

ENGLISH LITERATURE.

ESSAY.

FIRST-CLASS CERTIFICATE.—D. Nichol Smith, Edinburgh.

EXAMINATION.

FIRST-CLASS CERTIFICATE.—D. Nichol Smith, Edinburgh.

G. GREGORY SMITH, M.A., *Lecturer.*

ELEMENTARY HEBREW.

FIRST-CLASS CERTIFICATES.—James B. Penman (*Medallist*) and Wm. Watson, M.A.
SECOND-CLASS CERTIFICATE.—Wm. M. Low.

ELEMENTARY ARABIC.

FIRST-CLASS CERTIFICATES.—Walter R. Henderson, M.A., and Andrew Tweedie, M.A.

W. B. STEVENSON, B.D.
Assist. to Prof. of Semitic Languages.

ANCIENT PHILOSOPHY.

HONOURS HALF-COURSE.

No competitive examinations were held.

R. P. HARDIE, M.A., *Lecturer.*

PSYCHOLOGY.

HONOURS HALF-COURSE.

No competitive examinations were held.

C. M. DOUGLAS, M.A., D.Sc., *Lecturer.*

MATHEMATICS.

ADVANCED CLASS—HONOURS GRADUATION HALF-COURSE.

PRIZE, MEDAL, AND FIRST-CLASS CERTIFICATE.—A. Brown, Edinburgh.

FIRST-CLASS CERTIFICATES.—D. M. Aitken, Edinburgh; A. G. Donald, Edinburgh; A. M. Gordon, Halifax, N.S.; J. Hay, Edinburgh; 6. G. Robertson, Edinburgh.

PASS GRADUATION HALF-COURSES.

SENIOR LOWER—FIRST HALF-COURSE.

PRIZE AND FIRST-CLASS CERTIFICATE.—W. A. Curtis, Edinburgh.

SECOND-CLASS CERTIFICATES.—C. S. Findlay, Thurso; D. Neilson, Edinburgh; D. A. Stewart, Thurso; W. L. Webster, Murrayfield.

SENIOR HIGHER—SECOND HALF-COURSE.

PRIZE AND FIRST-CLASS CERTIFICATE.—P. Thomsen, Leith.

FIRST-CLASS CERTIFICATES.—M. N. G. Gray, Edinburgh; W. D. Ross, Caithness.

SECOND-CLASS CERTIFICATES.—R. T. Currall, Leith; W. H. Prentice, Edinburgh; J. W. Stewart, Edinburgh.

CHAS. TWEEDIE, M.A., B.Sc., *Lecturer.*

APPLIED MATHEMATICS.

THEORY OF ELECTRICITY AND MAGNETISM.

No competitive examinations were held.

C. G. KNOTT, D.Sc., *Lecturer.*

ADVANCED EXPERIMENTAL PHYSICS.

No competitive examinations were held.

W. PEDDIE, D.Sc., *Lecturer.*

WINTER SESSION, 1894-95.

LATIN.

HONOURS CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. W. J. Keith, Joppa, and T. B. M. Lamb, Cumberland—equal (*Medallists*); 3. D. A. Macnaughton, Kenmore; 4. Francis Dewar, Edinburgh; 5. Alexander Macgregor, Edinburgh.

SECOND-CLASS CERTIFICATES OF MERIT.—6. Peter Macgregor, Perth; 7. W. Cuthbert Morton, Trinidad; 8. G. R. T. Ross, Edinburgh.

PRIZES FOR LATIN PROSE COMPOSITION.—1. T. B. M. Lamb, Cumberland; Alexander Macgregor, Edinburgh; and D. A. Macnaughton, Kenmore—equal.

SENIOR CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. T. S. Macpherson, Kingussie; 2. A. B. Keith, Joppa, and Lilian C. Graham, Edinburgh—equal (*Medallists*); 4. Alexander Sharp, Galashiels; J. Adam Gray, Edinburgh; and David L. Norrie, Edinburgh—equal; 7. D. H. Macgregor, Dumfries; 8. Helen Cameron, Edinburgh; 9. Alexander Flint, Edinburgh; 10. Margaret J. Stewart, Largs.

SECOND-CLASS CERTIFICATES OF MERIT.—11. W. A. Dunnett, Kilmarnock; 12. Alice Paterson, Edinburgh; 13. Charles Anderson, Orkney, and C. A. Soutar, Arbroath—equal; 15. Archibald Scott Ballantyne, Galashiels; George Clark, Edinburgh; and Herbert Smiles, Edinburgh—equal; 18. Alexander F. Black, Mid-Lothian; A. J. Forrest, Edinburgh; and John Muir, Orkney—equal; 21. W. Porter, Edinburgh, and J. H. Cattanach, Edinburgh—equal; 23. Alexander Crichton, Arbroath; Victor Caldwell, Edinburgh; and W. H. Fraser, Edinburgh—equal; 26. D. T. Stewart, Borrowstowness; 27. Edith Graham, Edinburgh; 28. George Brown, Hawick; 29. Wilhelmina Kerr, Edinburgh; 30. William Bryce, Dundee, and Jeannie W. Robertson, Edinburgh—equal; 32. A. Sutherland, Caithness; 33. Annie C. Sutherland, Ross-shire; 34. A. M. Anderson, Edinburgh; G. C. I. Robertson, Clackmannan; and W. C. A. Ross, Edinburgh—equal; 37. W. M. K. Henderson, Dumfries; 38. W. Murray Stuart, Mid-Lothian, and J. K. Macgregor, Edinburgh—equal.

LATIN PROSE COMPOSITION.

PRIZES.—1. D. H. Macgregor, Dumfries; 2. A. B. Keith, Joppa, and T. S. Macpherson, Kingussie—equal.

HONOURABLE MENTION.—3. William Dick, Edinburgh; 4. J. Adam Gray, Edinburgh; 5. Alice Paterson, Edinburgh: 6. D. G. Norrie, Edinburgh; 7. A. J. Forrest, Edinburgh; 8. Helen Cameron, Edinburgh, and D. J. Boyd, Edinburgh—equal; 10. Harry Robertson, Edinburgh; 11. W. H. Henderson, Edinburgh.

ROMAN LITERATURE AND HISTORY.

PRIZE.—1. T. S. Macpherson, Kingussie.

HONOURABLE MENTION.—2. Lilian C. Graham, Edinburgh; 3. Alexander Sharp, Edinburgh, and Alexander Flint, Edinburgh—equal; 5. A. B. Keith, Joppa, and Charles A. Soutar, Arbroath—equal.

JUNIOR CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. James M. Dunnett, Kilmarnock; 2. William Rennie, Addiewell (*Medallists*); 3. Jeannie C. Thomson, Rothesay; 4. Archibald Milne, Edinburgh; 5. R. S. Enever Todd, Musselburgh, and Matthew Ketchin, Roslin—equal; 7. Janet B. Imrie, Castle-Douglas; 8. John Kermack, Kirriemuir; 9. Samuel F. Stewart, Largs; 10. J. B. Rodger, Forfar.

SECOND-CLASS CERTIFICATES OF MERIT.—11. Edward R. I. Stevenson, Broughty Ferry; 12. Isabella C. Black, East Calder; James F. Hair, Fifeshire; David H. Sawers, Edinburgh; and Frank Duncanson, Burntisland—equal; 16. J. D. Macleod, Burntisland; 17. Lucy C. Macfarlane, Prestonkirk; Thomas C. Adam, Blairgowrie; John Laidlaw, Jedburgh; and Fred. C. Minto, Dundee—equal; 21. Archibald W. Mackie, Ross-shire; Charlotte B. Macdonald, Aberdeen; and Bertha Blackstock, Kirkcaldy—equal; 24. Daniel A. Morrison, Perthshire; 25. Annie M. Methven, Fife; 26. Sara L. Croal, Edinburgh; and Alexander Grant, Dufftown—equal; 28. James Wight, Dundee; 29. John Methven, Kinghorn; and William Mowat, Blackheath—equal; 31. Alexander Aitken, Broughty Ferry; and Helen Macfie, Whithorn—equal.

LATIN PROSE COMPOSITION.

PRIZES.—1. William Rennie, Addiewell; 2. J. M. Dunnett, Kilmarnock; Jeannie C. Thomson, Rothesay.

HONOURABLE MENTION.—4. Bertha Blackstock, Kirkcaldy; 5. Alexander Grant, Dufftown; 6. R. S. Enever Todd, Musselburgh; 7. Isabella C. Black, East Calder; and F. C. Minto, Dundee—equal; 9. J. Methven, Fife; J. B. Rodger, Forfar; and Charlotte B. Macdonald, Aberdeen—equal; 12. E. R. I. Stevenson, Broughty Ferry; and Samuel F. Stewart, Largs—equal.

ROMAN LITERATURE AND HISTORY.

PRIZE.—J. M. Dunnett, Kilmarnock.

HONOURABLE MENTION.—2. William Rennie, Addiewell; 3. J. D. Macleod, Burntisland; 4. Archibald Milne, Edinburgh; and Thomas C. Adam, Blairgowrie—equal; 6. Isabella C. Black, East Calder; and R. S. Enever Todd, Musselburgh—equal.

FRANCIS R. JAMIESON, M.A.,
for the Professor of Humanity.

GREEK.

HONOURS CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. W. J. Keith, Joppa; and Alexander M'Gregor, Edinburgh—equal (*Medallists*);

3. Jessie Muir, Hawick; 4. D. W. Inglis, Northumberland, and William C. Morton, Trinidad—equal; 6. G. D. Low, Edinburgh.

SECOND-CLASS CERTIFICATES OF MERIT.—Sidney G. Campbell, Londonderry; 8 Francis Dewar, Edinburgh; 9. Marshall N. G. Gray, Edinburgh; 10. Peter M'Gregor, Perth.

COMPOSITION PRIZE.—W. J. Keith.

SENIOR CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. Arthur Berriedale Keith, Joppa (*Medallist*); 2. David L. Norrie, Edinburgh; 3. John Adam Gray, Edinburgh; 4. Alexander Flint, Edinburgh; and S. A. Kinnier Wilson, Edinburgh—equal; 6. Joseph H. Cattanach, Edinburgh; 7. Herbert Smiles, Edinburgh.

SECOND-CLASS CERTIFICATES OF MERIT.—8. A. F. Black, Mid-Lothian; 9. A. J. Forrest, Edinburgh; 10. Victor Caldwell, Edinburgh; 11. Alexander Sutherland, Caithness; 12. Harry Robertson, Edinburgh; 13. William Porter, Edinburgh; 14. William C. A. Ross, Edinburgh; 15. John Millar, Ayrshire; 16. G. C. I. Robertson, Clackmannan; 17. H. C. Miller, Genoa; 18. John Pattison, Dumfriesshire.

COMPOSITION PRIZE.—A. B. Keith and D. L. Norrie—equal.

HISTORY PRIZE.—A. B. Keith. HONOURABLE MENTION.—Joseph H. Cattanach.

LITERATURE PRIZE.—A. B. Keith. HONOURABLE MENTION.—D. L. Norrie and S. A. K. Wilson—equal.

The subject for private readings for the winter session 1895-96 will be Aristoph., *Birds* (Merry's Ed.)

JUNIOR CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES OF MERIT.—1. William Rennie, Addiewell (*Medallist*); 2. James Dunnett, Kilmarnock; 3. Francis Esquilant, Penicuik; and James B. Rodger, Forfar—equal; 5. David Robertson, Stranraer.

SECOND-CLASS CERTIFICATES OF MERIT.—6. E. B. Jamieson, Shetland; 7. A. W. Mackie, Ross-shire; 8. D. A. Morrison, Perthshire; 9. W. G. Mackean, Edinburgh; and R. S. Enever Todd, Musselburgh—equal.

COMPOSITION PRIZE.—William Rennie.

HISTORY PRIZE.—James Dunnett. HONOURABLE MENTION.—William Rennie.

LITERATURE PRIZE.—William Rennie. HONOURABLE MENTION.—James Dunnett and Francis Esquilant.

GRAMMAR PRIZE.—William Rennie.

S. H. BUTCHER, LL.D., *Professor.*

RHETORIC AND ENGLISH LITERATURE.

I.—CLASS PRIZES AND CERTIFICATES OF DISTINCTION.

PRIZES.—1. D. A. Macnaughton, Perthshire, and 2. Robert Whyte, Edinburgh (*Medallists*); 3. Henry Macarthur, Edinburgh, and George D. Shepherd, Ecclemachan—equal; 5. H. W. Robinson, Northampton; 6. J. M. Macmillan, Edinburgh; 7. Alex. Easson, Dunfermline, and Margaret Heslop, Newcastle—equal; 9. Frank Young, Kirkcaldy; 10. David M. Aitken, Dalkeith, and Emily M. Milligan, Edinburgh—equal; 12. C. C. Watson, Edinburgh; 13. T. S. Macpherson, Inverness-shire; 14. Louisa R. Boyd, Edinburgh; 15. J. S. Wilson, Demerara; 16. Andrew J. Forrest, Edinburgh; 17. Eleanor J. C. Lorimer, Edinburgh; 18. S. G. Campbell, Londonderry, and M. C. M'Alpin, London—equal.

CERTIFICATES OF DISTINCTION.—20. William Moncrieff, Perth; 21. Andrew Hunter, Edinburgh; 22. W. H. Fraser, Edinburgh; 23. Archibald Milne, Edinburgh; 24. Margaret S. Maiden, Kirkcaldy; 25. D. W. Inglis, Northumberland; 26. J. C. Cuthbert, Dundee; 27. Alexander M. Gordon, Halifax, N.S.; 28. Colin S. M. Brown, Shetland; 29. Mary Wightman, Lockerbie; 30. Ethelwyn Lemon, Northumberland; 31. Catherine J. Drummond, Edinburgh; 32. Annie Buist, Edinburgh, and Davin H. Christie, Gilmerton—equal; 34. Marshall N. Gray, Edinburgh; 35. Joan N. Brown, Edinburgh, and W. H. Holdsworth, Burley—equal; 37. Charles Anderson, Orkney, E. M. Anderson, Edinburgh, and John Chalmers, Bathgate—equal; 40. Alison T. Cowe, Penicuik, and James A. Davidson, Edinburgh—equal; 42. Allan W. Menzies, Edinburgh.

II.—ESSAY PRIZES AND CERTIFICATES OF DISTINCTION.

PRIZES.—1. Louisa R. Boyd, Edinburgh, and Henry Macarthur, Edinburgh (*Medallists*)—equal; 3. George C. Rankin, Edinburgh; 4. W. H. Holdsworth, Burnley, and Robert Whyte, Edinburgh—equal; 6. Marshall N. G. Gray, Edinburgh; 7. Helen M. Cole, Boston, U.S.A.; 8. H. W. Robinson, Northampton; 9. A. G. Donald, Edinburgh; 10. E. A. Braine, Montrose, J. T. Findlay, Peterhead, and A. R. Yoeman, Lincolnshire—equal; 13. James S. Wilson, Demerara; 14. Catherine J. Drummond, Edinburgh, Andrew Hunter, Edinburgh, and D. W. Inglis, Northumberland—equal.

CERTIFICATES OF DISTINCTION.—17. D. G. Young, Perth; 18. George Brown, Hawick; 19. J. M. Macmillan, Edinburgh; 20. R. W. Mackenna, Dumfries, D. A. Macnaughton, Perthshire, and W. Moncrieff, Perth—equal; 23. Alex. Easson, Dunfermline, John K. Graham, Edinburgh, and Margaret Heslop, Newcastle—equal; 26. John Gibson, Edinburgh, Eleanor J. C. Lorimer, Edinburgh,

and W. M. Paul, Dollar—equal; 29. Ethelwyn Lemon, Northumberland, G. D. Shepherd, Ecclemachan, and T. S. Macpherson, Inverness-shire—equal.

III.—PRIZE FOR WORK IN OLD ENGLISH.

T. S. Macpherson, Inverness-shire.

IV.—PRIZE FOR POETICAL COMPOSITION.

R. W. Mackenna, Dumfries.

DAVID MASSON, LL.D., *Professor.*

ENGLISH LITERATURE.

HONOURS HALF-COURSE.

MEDAL AND FIRST-CLASS CERTIFICATE.—D. Nichol Smith, Edinburgh.

OLD AND MIDDLE ENGLISH.

HONOURS HALF-COURSE.

MEDAL AND FIRST-CLASS CERTIFICATE.—D. Nichol Smith, Edinburgh.

G. GREGORY SMITH, M.A., *Lecturer.*

FRENCH.

FIRST-CLASS CERTIFICATES.—Lilian Graham and Mabel M. E. Smith (*Medals*); Bessie H. A. Robson and Oswald F. Lumsden (*Prizes*); Jeannie W. Robertson, Jeanie C. Thomson, Jessie A. M'Kechnie, Katherine G. Lawson, Anne Buist, and William D. Falconer.

SECOND-CLASS CERTIFICATES.—Mary S. Melville Bell, Henry D. Sprague, Sarah W. Davison, and Isobel B. Mason.

CH. SAROLEA, Ph.D., D.Litt., *Lecturer.*

GERMAN.

ORDINARY CLASS.

PRIZES AND FIRST-CLASS CERTIFICATES.—1. Bessie H. A. Robson, Edinburgh (*Medallist*); 2. Geo. J. Macgillivray, Edinburgh; 3. Mabel M. E. Smith, Edinburgh.

FIRST-CLASS CERTIFICATES.—4. Geo. Ednie, Edinburgh; 5. Jeanie Craig Thomson, Rothesay; 6. Jeannie W. Robertson, Edinburgh; 7. Mary S. M. Bell, Edinburgh; 8. Wilhelmina M. Kerr, Edinburgh; 9. M. Lousia Thomson, Edinburgh.

SECOND-CLASS CERTIFICATES.—10 Charlotte E. Tweedie, Swinton; 11. Rosa Stoltz, Liberton; 12. Nan. Anderson, Carnock.

HONOURS CLASS.

FIRST-CLASS CERTIFICATE.—Margaret B. Smith, Edinburgh (*Medallist.*)

O. SCHLAPP, *Lecturer.*

SANSKRIT.

Sidney G. Campbell, *Class Medal* and *Muir Prize* of £3. 3s.

J. EGGELING, Ph.D., *Professor.*

CELTIC LANGUAGES AND LITERATURE.

CELTIC CLASS.

PRIZES AND CERTIFICATES.—1. Norman Mackenzie, M.A., Croy (*Medallist*); 2. Duncan Macpherson, M.A., Gairloch; 3. Donald Maclean, Applecross.

CERTIFICATES OF MERIT.—Ewen Fraser, Stratherrick; Donald Campbell, Inverness.

ADVANCED CELTIC CLASS.

PRIZE AND CERTIFICATE.—Ella C. Carmichael, Edinburgh.

GAELIC CLASS.

PRIZES AND CERTIFICATES.—1. Norman Campbell, Lochbroom (*Medallist*); 2. Donald Grant, Carrbridge.

SPECIAL PRIZES.—£10, 10s. given by the Highland Society of London, Norman Mackenzie, M.A. Book prizes given by John Mackay, Esq., Hereford, for essays written in Scottish Gaelic. *Celtic Class.*—Norman Mackenzie, M.A.; Donald Maclean. *Gaelic Class.*—Norman Campbell.

DON. MACKINNON, M.A., *Professor.*

LOGIC AND METAPHYSICS.

ADVANCED CLASS—METAPHYSICS.

PRIZES AND FIRST-CLASS CERTIFICATES.—1. Alexander Mair, Irvine (*Bruce of Grangehill and Falkland Prize, and Medal*; 2. John Macaskill, Dingwall; J. B. Russell, Greenock; and Robert Whyte, Edinburgh—equal.

JUNIOR CLASS—LOGIC AND PSYCHOLOGY.

PRIZES AND FIRST-CLASS CERTIFICATES. 1. G. C. Rankin, Edinburgh; 2. C. M. Campbell, Edinburgh (*Medallists*); 3. Margaret Drummond, Edinburgh (*Elizabeth Hamilton Prize*); and D. Macrae Aitken, Edinburgh—equal; 5. A. G. Hogg, Edinburgh; 6. T. C. Alexander, Forfar, and John Ewart, Dalbeattie—equal; 8. Æneas Rose, jun., Blair Atholl; William Mair, Edinburgh; and D. T. Mackintosh, Kingussie—equal; 11.

John Lees, Ayr; 12. W. C. Morton, Trinidad; J. W. H. Smith, Edinburgh; and George Clark, Falkirk—equal.

SECOND-CLASS CERTIFICATES.—15. H. W. Robinson, Northampton; 16. Helen Cameron, Edinburgh; 17. Marcus Dods, Edinburgh; 18. E. M. Anderson, Edinburgh; 19. J. M. A. Macmillan, Edinburgh; 20. Helen Macfie, Whithorn; 21. R. C. Henderson, Crieff; 22. Kate G. Fraser, Edinburgh, and William Smith, Edinburgh—equal; 24. Andrew Hunter, Edinburgh; 25. S. G. Campbell, Londonderry; 26. Agnes H. Pitcairn, Hawick, and George Ednie, Edinburgh—equal; 28. C. T. Macgregor, East Calder; 29. Bruce M'Ewan, Stonehaven.

ANDREW SETH, LL.D., *Professor.*

MORAL PHILOSOPHY.

HONOURS CLASS.

PRIZES.—1. Alexander Mair, Ayrshire (*Medallist*); 2. James Drever, Orkney; 3. John Macaskill, Dingwall.

FIRST-CLASS CERTIFICATES.—4. Robert Whyte, Edinburgh; 5. James B. Russell, Greenock.

MERIT IN ESSAY.—Robert W. Dickie, Toronto, Canada.

ORDINARY CLASS.

PRIZES.—1. Alexander Darroch, Greenock; 2. Charles Robertson, Roxburghshire; 3. Alexander M. Gordon, Halifax, Nova Scotia (*Medallists*); 4. H. Wheeler Robinson, Northampton; 5. David M. Aitken, St Andrews; 6. Alexander R. Yeoman, Lincolnshire; 7. James G. Burns, Larkhall; 8. Nettie R. Duncan, Kinross; 9. William Mackenzie, Cromarty; and Donald Martin, Crieff—equal.

FIRST-CLASS CERTIFICATES.—11. George N. Dods, Berwickshire; 12. John M. Macmillan, Edinburgh; 13. William H. Holdsworth, Burnley; 14. Helen Robertson, Edinburgh; 15. Alexander Easson, Dunfermline; 16. William L. Webster, Edinburgh.

SECOND-CLASS CERTIFICATES.—17. Duncan D. Cameron, Alness; 18. James J. Macnair, Glasgow; 19. J. R. Welsh, Edinburgh; 20. Frank O'Hellier, Iowa, U.S.A., and George J. Macgillivray, Edinburgh—equal; 22. William H. Sellar, Sanquhar; 23. James M. L. Brown, Airdrie; 24. Daniel Cameron, Crieff; 25. Thomas C. Macaulay, Irvine; 26. David Mair, Ireland; 27. John K. Graham, Galashiels; 28. Malcolm Campbell, Edinburgh.

STUDY OF KANT'S "ETHICS."

PRIZES.—1. Alexander Darroch, Greenock (*Medallist*); 2. Alexander M. Gordon, Halifax, Nova Scotia, and H. Wheeler Robinson, Northampton—equal.

FIRST-CLASS CERTIFICATES.—4. David M. Aitken, St Andrews, and Alexander R. Yeoman, Lincolnshire—equal.

H. CALDERWOOD, LL.D., *Professor.*

POLITICAL ECONOMY AND MERCANTILE LAW.

PRIZES.—1. Charles Robertson, Roxburghshire (*Medal and Merchant Company's Prize of* £10, 10s.); 2. Charles Stewart Findlay, Thurso (*George Watson's Prize*); 3. Alexander Brown, Edinburgh, and John W. Stewart, Edinburgh—equal (*Daniel Stewart's Prize*); 5. John M'Farlane Doig, Edinburgh; 6. Robert Gray, Edinburgh; 7. Malcolm Caird M'Alpin, London; and George John Macgillivray, Edinburgh—equal; 9. Malcolm N. MacInnes, M.A., Skye.

FIRST-CLASS CERTIFICATES.—10. James J. Macnair, Glasgow; 11. Charles Ross Lowdon, Kirriemuir; 12. J. Carr Lees, Edinburgh; 13. James M. Smith, Leith; 14. William W. Smith, Edinburgh, and George Murray, Edinburgh—equal; 16. George C. Rankin, Edinburgh.

HONOURABLE MENTION FOR TWO EXAMINATIONS.—Alan W. C. Menzies, Edinburgh.

ESSAYS.—1. James J. Macnair (*Prize*); 2. George C. Rankin (*Prize*); 3. C. S. Findlay; 4. J. M. Smith; 5. G. J. Macgillivray; 6. A. Graham Donald.

HONOURABLE MENTION FOR ONE ESSAY.—C. R. Lowdon, J. H. Guild, G. A. Wilson, J. Carr Lees, J. Hyde.

For the Professor of Political Economy,
A. H. B. CONSTABLE, LL.B., *Interim Lecturer.*

THEORY, HISTORY, AND ART OF EDUCATION.

FIRST-CLASS CERTIFICATES.—James Bremner (*Medal*), George Brown, Margaret Brown, William Bryce, Helen M. Burt, Adam Cameron, Helen Cameron, George Clark, Jessie Coombs, James M. Duthie, Marjory Fraser, Mabel Fuller, Elizabeth Garrett, Mary Hogg, W. H. Holdsworth, Maggie Maiden, James Mitchell, Maud A. Murray, Jane Niven, Isabella M. Philip, M. B. Renton, Alexander Sharp, Mary Smiles

S. S. LAURIE, LL.D., *Professor.*

MATHEMATICS.

ADVANCED HONOURS CLASS.

FIRST-CLASS CERTIFICATES.—1. J. F. Cameron, Perthshire (*Medal*); 2. Miss J. C. Macmillan, Edinburgh (*Prize*); H. A. Braine, Edinburgh.

SECOND-CLASS CERTIFICATES.—A. D. Russell, Edinburgh (attending for a second time); W. Jeffrey, Newcastle-on-Tyne; A. C. Smith, Dumfries.

INTERMEDIATE HONOURS CLASS.

First-Class Certificates.—M. C. M'Alpin, London (*Prize and Medal*); A. Brown, Edinburgh; J. C. Leighton, Dundee.

Second-Class Certificates.—D. M. Aitken, Edinburgh; J. S. Begg, Edinburgh; L. O. Critchley, Inverness; G. Robertson, Edinburgh.

SENIOR CLASS.

Prizes and First-Class Certificates.—1. D. Banks, Stranraer (*Medal*); 2. J. M. Low, Leith (*Medal*); 3. C. M. Campbell, Edinburgh; 4. D. H. M'Gregor, Dumfries, and W. D. Proudfoot, Perth—equal; 6. J. B. Meiklejohn, Thurso; 7. E. A. Braine, Montrose, and W. B. Dick, Wick—equal; 9. P. Thomsen, Leith; 10. A. B. Lennie, Edinburgh; 11. J. Lornie, Perth, and D. Robertson, Stranraer—equal; 13. H. J. G. Ross, Coupar-Angus.

Second-Class Certificates.—W. Blackadder, Broughty-Ferry; Mary P. G. Cook, Dumfries; J. C. Cuthbert, Dundee; G. S. Dickson, Newport; J. M. Doig, Edinburgh; M. N. G. Fallas, Dumfries; A. R. Johnston, Forfar; W. Mair, Edinburgh; W. C. R. Munro, Thurso; D. Neilson, Edinburgh; R. Norrie, Dundee; C. A. Souter, Arbroath; D. A. Stewart, Thurso; J. W. Stewart, Edinburgh; Margaret J. Stewart, Largs; Marion A. S. Thomson, Edinburgh; S. A. K. Wilson, Edinburgh; J. Winchester, Edinburgh.

JUNIOR MATHEMATICS.

Prizes and First-Class Certificates. 1. A. Sharp, Galashiels (*Medal*); 2. E. Blades, Armadale; 3. A. F. Black, Mid-Lothian; J. P. Hutchison, Paisley; and A. B. Robb, Bathgate—equal.

Second-Class Certificates. — J. Aim, Orkney; A. Aitken, Broughty-Ferry; C. Anderson, Orkney; Alison T. Cowe, Penicuik; H. C. Duncan, Edinburgh; J. M'C. Duthie, Orkney; W. A. Forsyth, Galashiels; Kate G. Frazer, Edinburgh; A. Grant, Dufftown, N.B.; D. Grant, Inverness; J. F. Hair, Fife; J. Laidlaw, Jedburgh; J. M'Lean, Forres; J. Methven, Kinghorn; J. T. Miller, Edinburgh; F. C. Minto, Edinburgh; D. Reid, Wick; J. Rodger, Crieff; D. Stevens, Perth; E. R. J. Stevenson, Broughty-Ferry; S. F. Stewart, Largs; T. W. Stewart, Thurso; Margaret C. Watson, Edinburgh; J. Wight, Dundee.

The Kelland Prize, open to students of the Junior Mathematical Class of the previous session, was awarded to H. Wilkie, Lochgelly.

The Newton Bursary in Senior Mathematics has been awarded to J. H. Meiklejohn.

G. CHRYSTAL, LL.D., *Professor.*

NATURAL PHILOSOPHY.

ORDINARY CLASS—HIGHER DIVISION.

PRIZEMEN AND UNIVERSITY CERTIFICATES.—1. D. Banks, Stranraer, and C. M. Campbell, Edinburgh—equal (*Medallists*) ; 3. E. M. Anderson, Edinburgh ; 4. J. M. Low, Leith, and B. M'Ewen, Stonehaven—equal.

CERTIFICATE OF MERIT.—6. R. Norrie, Dundee.

LOWER DIVISION.

PRIZEMEN AND FIRST-CLASS CERTIFICATES.—1. R. Bell, Dumfries ; 2. Miss A. B. Lennie, Edinburgh (*Medallists*) ; 3. W. Mair, Edinburgh, and A. W. C. Menzies, Edinburgh—equal ; 5. J. Brown, Edinburgh ; 6. J. Lornie, Perth, and D. Robertson, Stranraer—equal ; 8. J. Winchester, Edinburgh ; 9. W. Dick, Wick, and M. N. G. Gray, Edinburgh—equal ; 11. E. A. Braine, Edinburgh, and H. J. G. Ross, Cupar-Angus—equal ; 13. J. T. Young, Edinburgh ; 14. D. Neilson, Edinburgh, and A. Young, Edinburgh—equal ; 16. H. Wilkie, Lochgelly ; 17. F. Young, Kirkcaldy.

CERTIFICATES OF MERIT.—18. A. R. Johnston, Forfar ; 19. A. R. Cook, Fountainhall ; J. M'Farlane, Prestonkirk ; and W. D. Proudfoot, Perth—equal ; 22. G. J. M'Gillivray, Edinburgh, and W. Robb, Mid-Lothian—equal ; 24. W. C. B. Munro, Thurso ; 25. D. Reid, Caithness ; 26. Miss Cook, Dumfries, and Miss Thomson, Edinburgh—equal ; 28. W. C. Baxter, Fife, and J. M. L. Brown, Airdrie—equal ; 30. Miss Stoltz, Edinburgh ; 31. John Gibson, Edinburgh, and O. F. Lumsden, Edinburgh—equal ; 33. J. M. A. Macmillan, Edinburgh, and C. H. Moore, Musselburgh—equal ; 35. G. M. Dodds, Edinburgh, and J. Maclean, Forres—equal ; 37. Miss Buist, Forfar ; 38. P. Drummond, Edinburgh.

PRIZE FOR THE FORTNIGHTLY EXAMINATIONS.—R. Bell.

PHYSICAL LABORATORY.

The following are highly recommended :—D. M. Aitken, T. N. Annandale, A. Brown, L. O. Critchley, A. G. Donald, A. M. Gordon, P. St C. Hardie, D. Neilson, G. Robertson.

ADVANCED CLASS.

PRIZEMAN AND FIRST-CLASS CERTIFICATE.—1. James A. Macdonald, Leith, (*Medal*) ; 2. J. F. Cameron, Perthshire ; 3. A. C. Smith, Dumfries ; 4. T. W. Pickles, Yorkshire.

CERTIFICATE OF MERIT.—5. W. Jeffrey, Newcastle-on-Tyne.

NEIL-ARNOTT SCHOLARSHIP.—P. St C. Hardie.

FRASER BURSARY.—L. O. Critchley.

NEWTON BURSARY.—(Award pending.)

P. G. TAIT, M.A., *Professor.*

NATURAL PHILOSOPHY.

INTERMEDIATE HONOURS.

FIRST-CLASS HONOURS.—1. M. C. M'Alpin (*Medal and Prize*); 2. J. C. Leighton.
SECOND-CLASS HONOURS.—3. Alexander Brown.

C. G. KNOTT, D.Sc., *Lecturer.*

HISTORY.

HONOURS COURSE.

"Wycliffe: Times and Influence."

HONOURS IN EXAMINATIONS.—1. Charles Stuart Pennell (*Medal and 1st Prize*); 2. D. Nichol Smith (*2nd Prize*).
HONOURS IN ESSAYS.—1. C. S. Pennell (*Prize*); 2. Miss Agnes B. Bruce (*Prize*).

J. KIRKPATRICK, LL.D., *Professor.*

HISTORY.

HONOURS COURSE.

"Creation of the British Empire."

1. C. S. Pennell (*Medallist*); 2. W. L. Mathieson; 3. Miss M. A. Clapperton and C. S. Wallace—equal; 5. A. G. Tait.

GENERAL BRITISH HISTORY.

1. C. S. Pennell (*Medallist*); 2. C. Menmuir; 3. J. W. Purves; 4. J. M'Farlane, Miss F. H. Melville, and F. Young—equal; 7. Miss L. R. Boyd, G. D. Shepherd, D. Nichol Smith, and Miss A. G. Smith—equal; 11. W. K. Aikman, J. S. Macdonald, and Miss E. M. Milligan—equal; 14. Miss J. R. Beatson-Bell, Miss L. A. Johnstone, and N. S. Lindsay—equal.

G. W. PROTHERO, D.Litt., *Professor.*

FINE ART.

MEDAL AND COUSIN PRIZE FOR ESSAYS.—Charles Menmuir.
SECOND PRIZE.—Percy E. Nobbs.
PRIZE FOR FIRST PLACE IN CLASS EXAMINATIONS.—S. A. Kinnier Wilson.
PRIZES FOR MERIT IN ESSAYS.—Peter T. Hall and W. Marshall Low.
FIRST-CLASS CERTIFICATE.—Charles T. Macgregor.

G. BALDWIN BROWN, M.A., *Professor.*

Preliminary Examination Papers for Degrees in Arts, Science, Law (B.L.), and Music.

ENGLISH.

Saturday, 29th September 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

(FIVE *questions are to be answered, and no more. Questions* 1, 2, *and* 6 *must be attempted by all.*)

1. Write an essay, about two pages long, on either of these subjects:—

(1) The character of Anthony Foster.

(2) "There is no vice so simple, but assumes
Some mark of virtue on his outward parts."

2. Paraphrase—

"Thyself and thy belongings
Are not thine own so *proper*, as *to waste*
Thyself upon thy virtues, them on thee.
Heaven doth with us as we with torches do,
Not *light* them for themselves; for if our virtues
Did not go forth of us, *'twere* all *alike*
As if we had them not. Spirits are not finely touch'd
But to fine issues; nor Nature never lends
The smallest scruple of her excellence
But, *like* a thrifty goddess, she determines
Herself the glory of a creditor,
Both thanks and use."

3. Parse the italicised words in the foregoing quotation. Give a general analysis of the following, stating exactly how the clauses are related to one another:—

"This be the verse you grave for me:
Here he lies where he longed to be;
Home is the sailor, home from sea,
And the hunter home from the hill."

4. Derive any *six* of the following words:—*Advantage, aid, aloof, blame, blank, carcer, character, enthusiasm, meadow, printing, prose, very.*

5. Examine the following for figures of speech, and define the figures you find:—

"We have strict statutes and most biting laws,
(The needful bits and curbs to headstrong steeds,)
Which for these fourteen years we have let sleep;
Even like an o'ergrown lion in a cave,
That goes not out to prey."

6. Improve the English of each of the following sentences, and give reasons for the alterations you make :—

(1) Modern discoveries have proved how unlike the maps of Africa, before D'Anville swept them clean, were to the reality, and how essential it was to make a new start.

(2) I have only been engaged in business for a fortnight subsequent to my leaving home, but me coming here has already proved a success.

(3) Plucky and patient, it is found that for sudden attacks, to chase rebels or punish freebooters, the natives of this country are second to none.

(4) He occupied himself for a while speculating on the probable effects of causes presently in operation, but neither considered that devoting further time to the subject was practicable or desirable.

Saturday, 29th September 1894.—12 *to* 2 *o'clock.*

SECOND PAPER.

(EIGHT *questions to be attempted, and no more : and, of these,* TWO *from each section.*)

A.

1. Name, with their approximate dates and the names of their authors, the works in which the following characters appear :—The Red Cross Knight, Griselda, Iago, Lovelace, Dugald Dalgetty, Sir Peter Teazle, Dalila, George Warrington, Guinevere, Mrs Gamp. Describe *one* of these characters.

2. Write a brief account of one of the longer poems of *each* of the following :—Wordsworth, Byron, Shelley. How were the works of these authors received by the public of the day, and how do you account for the different receptions given to them?

3. Explain, as clearly as possible, the meaning of the following terms :—Lyric, elegy, farce, dramatic unities, bombast, Renaissance, Dark Ages, pastoral, didactic.

4. *Either* compare Pope's style in poetry with Milton's, *or* compare Johnson as a prose writer with Macaulay.

B.

5. What are the prominent features of Elizabeth's character as brought out in *Kenilworth*, and how far are they true to history?

6. In what context does each of the following expressions occur?—"God made him and therefore let him pass for a man"; "that jumps

all with my humour"; "shall we hunt in couples?" "come, cudgel your memory"; "hates any man the thing he would not kill?"

7. What are the feelings that Shakespeare's delineation of Shylock arouses in us? At what points is our sympathy for Shylock elicited?

C.

8. Write brief expository notes on any four of the following:—The Hampton Court Conference, Ship money, The Star Chamber, The Long Parliament, The Royal Society, The Cabal, The Treaty of Dover, The Declaration of Indulgence, The Siege of Londonderry, Blenheim.

9. What were the leading historical events of each of the following years:—1604, 1629, 1638, 1641, 1660, 1689, 1692?

10. Contrast the ruling capacity of Charles I. with that of Charles II. Support your answer by examples.

11. Trace briefly the attitude of the Scots towards the Stuarts from 1603 to the Restoration.

12. Indicate the lines of Cromwell's foreign policy.

D.

13. Where are the following, and for what are they famous:—Alexandria, Mecca, Pondicherry, Cape St Vincent, Utrecht, Sadowa, Ravenna, Lexington, Marston Moor?

14. What physical peculiarities of the districts in which the following are located affect the industries of each:—Glasgow, Aberdeen, Birmingham, Sheffield, London, Dublin, Cork, Calcutta, Sydney?

15. Name and locate four places in India, four in Africa, three in Canada, and two in Belgium, that are associated with important events in British history.

16. Where, in the British Islands, are granite, gold, tin, lead, to be found? What counties in Great Britain are noted respectively for oats, hops, black cattle? Enumerate the salmon rivers of Scotland.

Saturday, 30th March 1895, 9 *to* 11 *o'clock.*

FIRST PAPER.

(FIVE *questions are to be answered, and no more. Questions* 1, 2, *and* 6 *must be attempted.*)

1. Write an Essay, from two to three pages long, on one of the following subjects:—

(*a*) Alsatia.
(*b*) Robinson Crusoe.
(*c*) Our duties to animals.

2. Paraphrase the following :—

To Lady Fitzgerald in her seventieth year.

Such age how beautiful ! O Lady bright,
Whose mortal lineaments seem all refined
By favouring Nature and a saintly mind
To something purer and more exquisite
Than flesh and blood ; whene'er thou meet'st my sight,
When I behold thy blanched, unwithered cheek,
Thy temples fringed with locks of gleaming white,
And head that droops because the soul is meek,
Thee with the welcome Snowdrop I compare ;
That child of winter, prompting thoughts that climb
From desolation toward the genial prime ;
Or with the Moon conquering earth's misty air,
And filling more and more with crystal light
As pensive evening deepens into night.

3. Parse the words or phrases italicised in the following sentences :— " I cannot understand *what* our friend *would be at*. He does not like *being questioned*. *Even* his wife is *at a loss*, and has *to wait* till he chooses to speak *further*. Can you *tell* me *who* can explain the matter ? "

Give a *general* analysis of the following, stating exactly how the clauses are related to one another :—" How often is the ambitious man mortified with the very praises he receives, if they do not rise so high as he thinks they ought, which they seldom do unless increased by flattery, since few men have so good an opinion of us as we have of ourselves."

4. Derive any six of the following words :—*saintly*, *crystal*, *manœuvre*, *simple*, *cynic*, *window*, *twenty*, *forlorn*, *quixotic*, *island*, *heathen*, *sovereign*.

5. Classify the following verbs according to their conjugation (weak or strong), and give the past indicative and past participle of each :— *Bid*, *bleed*, *flee*, *bereave*, *do*, *seethe*, *chide*. Give also (*a*) the plurals of *Mussulman*, *lord-justice*, *dogma*, *madame* ; (*b*) examples of gerundial infinitive, ethical dative, nominative absolute ; (*c*) examples of *but* and *as* used as relatives.

6. Improve the English of the following sentences, and give reasons for the alterations you make :—

(*a*) I shall not answer you because you are my friend.
(*b*) In one of the songs of the Edda the end of the world is described in a similar manner as in the New Testament.
(*c*) I have received the volume you sent me, and have lost no time in making myself acquainted with its contents.
(*d*) The world with all its trials is the furnace through which the soul must pass and be developed before it is ripe for the next.

Saturday, 30th March 1895.—12 *to* 2 *o'clock.*

SECOND PAPER.

(EIGHT *questions to be answered, and no more; and, of these,* TWO *from each section.*)

SECTION A.

1. Describe *two* of the following characters:—Rosalind, Shylock, Macbeth, Faithful, the Vicar of Wakefield, Meg Merrilies, Marmion, Sam Weller, the Princess Ida.

2. Give an account of the substance of *one* of the following:—(*a*) any book of *Paradise Lost*, or (*b*) any canto of *The Fairy Queen*, or (*c*) *The Ancient Mariner*.

3. Describe any long poem that you know by Chaucer, or Dryden, or Byron, or Keats, or Tennyson.

4. Name *four* of the most famous English writers during the reigns of Anne and George I., and give some account of any *one* of them.

SECTION B.

5. Sketch the action of *Julius Cæsar* from the opening of the play to the assassination of Cæsar.

6. "So far as Brutus was concerned, the assassination of Cæsar was a conscientious blunder." Discuss this statement.

7. Illustrate some of the characteristics of James I. by reference to particular scenes in *The Fortunes of Nigel*.

8. Sketch the character of Richie Moniplies, or of Lord Dalgarno.

SECTION C.

9. Give some account of the growth of manufacturing industries in Great Britain between 1750 and 1800, and of its economical and social effects.

10. Sketch the relations between Great Britain and Ireland from 1752 to the Union.

11. Write accounts of *two* of the following, so as to show their historical importance:—Walpole, the elder Pitt, the younger Pitt, Warren Hastings, George III., Canning.

12. Write short expository notes on *three* of the following:—The Septennial Act, the causes of the failure of the Jacobite Rising in 1745, the Letters of Junius, the Declaration of Independence of the United States, the Peninsular War, the Six Acts, the Reform Bill of 1832.

SECTION D.

13. Explain and illustrate the following terms :—Tropic, glacier, longitude, monsoon, archipelago. How is longitude expressed in time? Find the difference in time between

(*a*) Greenwich and St Petersburg (30° East Longitude),
(*b*) Greenwich and New York (74° West Longitude).

14. Name the leading industry in each of the following counties, and locate precisely its principal centre :—Fife, Ayr, Lanark, Forfar, York, Warwick, Antrim, Roxburgh, Leicester, Glamorgan, Selkirk.

15. What physical features have determined the basin and the course of the Rhine, *or* the Danube, *or* the Nile, *or* the Ganges, *or* the Mississippi? Locate accurately *eight* towns in the basin of the river you select.

16. From what countries is Great Britain supplied with wheat, cotton, flax, tea, rice, wine, jute, coffee? Name ports from which these products are shipped to this country.

Or,

Locate *eight* of the following places, and add descriptive notes :—Tokio, Sydney, Valparaiso, Vancouver City, Durban, Singapore, Penzance, Mannheim, Belgrade, Tasmania, Port Said, Erzeroum, New Orleans, Auckland, Adelaide, Hawaii.

LATIN.

HIGHER STANDARD.

Tuesday, 2nd October 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Translate into English :—

Et tibi, P. Nasica, et quicunque idem, quod tu, occultius senserunt, non gravabor reddere dilatae pugnae rationem. Nam tantum abest, ut me hesternae quietis paeniteat, ut servatum a me exercitum eo consilio credam. In qua me opinione sine causa esse ne quis vestrum credat, recognoscat, age dum, mecum, si videtur, quam multa pro hoste et adversus nos fuerint. Iam omnium primum, quantum numero nos praestent, neminem vestrum nec ante ignorasse et hesterno die explicatam intuentes aciem, animadvertisse certum habeo. Ex hac nostra paucitate quarta pars militum praesidio impedimentis relicta erat : nec ignavissimum quemque relinqui ad custodiam sarcinarum scitis. Sed fuerimus omnes ; parvum hoc tandem esse credimus, quod ex his castris, in quibus hac nocte mansimus, exituri in aciem hodierno aut summum crastino die, si ita videbitur, diis bene juvantibus, sumus? Nihilne interest, utrum militem, quem neque viae labor hodie neque operis

fatigaverit, requietum, integrum in tentorio suo arma capere jubeas, atque in aciem vigentem et corpore et animo educas, an longo itinere fatigatum, madentem sudore, ardentibus siti faucibus, torrente meridiano sole, hosti obicias recenti, qui nulla re ante consumptas vires ad praelium adferat? Quis ita comparatus, vel iners atque imbellis, fortissimum virum non vicerit?

2. Translate also:—

Ille deo plenus, tacita quem mente gerebat,
Effudit dignas adytis e pectore voces;
Quid quaeri, Labiene, iubes? An liber in armis
Occubuisse velim potius, quam regna videre?
An sit vita nihil, et longa? an differat aetas?
An noceat vis ulla bono? Fortunaque perdat
Opposita virtute minas? laudandaque velle
Sit satis, et numquam successu crescat honestum?
Scimus, et haec nobis non altius inseret Hammon.
Haeremus cuncti superis, temploque tacente,
Nil agimus nisi sponte dei; nec vocibus ullis
Numen eget: dixitque semel nascentibus auctor
Quidquid scire licet: steriles nec legit arenas,
Ut caneret paucis, mersitque hoc pulvere verum:
Estque dei sedes, ubi terra, et pontus, et aer,
Et caelum, et virtus. Superos quid quaerimus ultra?
Iuppiter est, quodcumque vides, quocumque moveris.
Sortilegis egeant dubii, semperque futuris
Casibus ancipites: me non oracula certum,
Sed mors certa facit: pavido fortique cadendum est.

Tuesday, 2nd October 1894.—12 *to* 2 *o'clock.*

SECOND PAPER.

1. Translate into Latin:—

Were I to name all those who have distinguished themselves by personal courage, I should have to name every man in the advanced guard of the army. They absolutely scorn danger and death; and, as their courage is wonderful, so also is the gaiety with which, with rude song and soldier-like merriment, they accomplish the severest marches. When with evening they reach their resting-place for the night, they are not anxious to take repose, but to tell each his own story of the battle of the day, and produce his plan for that of to-morrow. Many of them, moreover, think very justly on military subjects. A few days ago a common soldier approached me and said, General, you should do so-and-so. I told him to hold his peace and begone, and have been unable to find him since: yet the manœuvre which he recommended was the same as I had privately resolved to execute.

II. Grammar.

1. Give examples of nouns used in the singular only, in the plural only, with different meanings in singular and plural, with varying gender, and with varying stems.

2. Frame sentences to illustrate the following constructions, adding an English translation of each :—

(*a*) Accusative of kindred meaning.
(*b*) Dative of purpose.
(*c*) Possessive genitive after a verb.
(*d*) Subjunctive of virtually oblique oration.
(*e*) Subjunctive of exhortation in historic tense.

3. Translate and comment on the following :—

(*a*) Ira et cupiditas imperio potentiora erant.
(*b*) Explorato praedatum exierat.
(*c*) Praelium equestre adversum paucis ante diebus factum erat.
(*d*) Nisi nox certamen diremisset, omnibus ad unum pereundum erat.
(*e*) Exercitus ut satis firmus pacatae provinciae praeses erat, ita impar bello, quod motum iri videretur.

III. Sentences.

(1) The greater the danger, the greater the need of presence of mind.
(2) He showed an iron (*ferreus*) strength, such as no toil of body or mind could overcome.
(3) Though condemned to death for betraying his country, he was undoubtedly guiltless of the charge.
(4) When you reach Rome, do not leave the city without examining the ancient buildings.

Tuesday, 2nd April 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

I. Translate into English :—

1. *The Locrian ambassadors and the Roman lieutenant.*

Haec cum ab legatis dicta essent, quaesissetque ab iis Q. Fabius detulissentne eas querelas ad P. Scipionem, responderunt—missos legatos esse, sed eum belli apparatu occupatum esse, et in Africam aut iam traiecisse, aut intra paucos dies traiecturum ; et legati gratia quanta esset apud imperatorem expertos esse, cum inter eum et tribunos cognita causa, tribunos in vincula coniecerit, legatum aeque sontem, aut magis etiam, in ea potestate reliquerit. Iussis excedere e templo legatis, non Pleminius modo, sed etiam Scipio principum orationibus lacerari. Ante omnes Q. Fabius natum eum ad corrumpendam disciplinam militarem arguere ; sic et in Hispania plus prope per sedi-

tionem militum quam bellum amissum; externo et regio more et indulgere licentiae militum, et saevire in eos. Sententiam inde aeque trucem orationi adiecit—Pleminium legatum vinctum Romam deportari placere, et ex vinculis causam dicere; ac si vera forent, quae Locrenses quererentur, in carcere necari, bonaque eius publicari.

2. *Tibullus, glad to abandon war, desires a country life.*

Divitias alius fulvo sibi congerat auro
Et teneat culti iugera multa soli,
Quem labor adsiduus vicino terreat hoste,
Martia cui somnos classica pulsa fugent:
Me mea paupertas vita traducat inerti,
Dum meus adsiduo luceat igne focus.
Iam modo iam possim contentus vivere parvo
Nec semper longae deditus esse viae,
Sed Canis aestivos ortus vitare sub umbra
Arboris ad rivos praetereuntis aquae.
Nec tamen interdum pudeat tenuisse bidentes
Aut stimulo tardos increpuisse boves,
Non agnamve sinu pigeat fetumve capellae
Desertum oblita matre referre domum.
At vos exiguo pecori, furesque lupique,
Parcite; de magno praeda petenda grege.

Scan lines 13 and 14.

Tuesday, 2nd April 1895.—12 *to* 2 *o'clock.*

SECOND PAPER.

I. Translate into Latin prose:—

Attalus or Philometor, king of Pergamus, made a will, by which he appointed the Roman people his heirs. The principal portion of it was expressed in these terms: "Let the Roman people inherit all my effects." As soon as this was read, Tiberius Gracchus, tribune of the people, and always eager to conciliate their favour, took advantage of the occasion, and, ascending the tribunal, proposed a law to the following effect,—that all the ready money which might accrue from this inheritance should be distributed among the poor citizens, that they might have the means of supporting themselves in their new possessions to which they were to proceed as colonists, and might be able to procure tools and other things necessary in agriculture. He added that, as to the cities and lands, which had been under the government of Attalus, the senate had no right to decree anything regarding them, but ought to leave the disposal of them entirely to the people, a statement which extremely offended the leading men among the Romans. That tribune was slain soon afterwards, in the year 133 B.C.

II. (*a*) Form sentences to shew the various meanings which *quam* may have in Latin.

(*b*) Explain fully the uses of the *gerundive*.

(*c*) Conjugate the verbs with which the following participles are connected: *compertus*, *refertus*, *devinctus*, *dilectus*, *coëmptus*, *affictus*, *ratus*, *commentus*, *emensus*, *exorsus*.

(*d*) Mark the quantities (1) of the *final* syllable of: *altus*, *mundo*, *vulnus*, *inter*, *postea*, *hosti*, *fertur*, *tamen*, *virtus*; (2) of the *second* syllables of: *vectigal*, *fortilis*, *tibicen*, *tubicen*, *consequi*, *cavere*, *cadere*, *robore*, *labore*; (3) of the *first* syllables of: *cogere*, *vocare*, *nobilis*, *iter*, *toga*.

III. Translate, with a note on the syntax of the words underlined:—

(1) Cave putes quicquam homines magis unquam esse miratos.

(2) O puer, ut sis vitalis metuo.

(3) Nil ego contulerim iucundo sanus amico.

(4) Si unum diem morati essent moriendum omnibus fuit.

(5) Naves deiciendi operis missae sunt.

IV. Translate into Latin:—

(*a*) The general declared that the city he had taken would be wholly destroyed on the 10th of May, but that all the inhabitants would be spared.

(*b*) We are told that the enemy were hotly pursued by our men, and that, after a fierce battle, they were completely defeated at Veii.

(*c*) Advice was brought to the king that many cities belonging to the enemy had been captured; that there was, however, great need for reinforcements; and that he should send help as soon as possible.

Lower Standard.

Monday, 1st October 1894.—9 *to* 12 *o'clock.*

I. Translate into English:—

The flight of Pompey from Pharsalia.

Caesar omnibus rebus relictis persequendum sibi Pompeium existimavit, quascumque in partes se ex fuga recepisset, ne rursus bellum renovare posset, et, quantumcumque itineris equitatu efficere poterat, quotidie progrediebatur. Pompeius quum Mitylenis biduum tempestate retentus esset, inde Cyprum pervenit, Syriam navigaturus. Ibi cognoscit arcem Antiochiae captam esse excludendi sui causa, numtiosque dimissos ad eos, qui se ex fuga in finitimas civitates recepisse dicerentur

ne Antiochiam adirent. Qua re cognita Pompeius deposito adeundae Syriae consilio Pelusium pervenit, atque ad regem Ptolemaeum misit, ut illius opibus in calamitate tegeretur. Sed ii qui ab eo missi erant, milites regis hortari coeperunt, ut suum officium Pompeio praestarent neve eius fortunam despicerent. Tum amici regis, sive timore adducti, sive despecta eius fortuna, ut plerumque in calamitate ex amicis inimici existunt, his, qui erant ab eo missi, liberaliter responderunt; ipsi clam consilium inierunt, ut Pompeium interficerent.

Why are *recepisset*, *diceretur*, in the subjunctive, *poterat*, *existunt*, in the indicative mood?

Distinguish *neve* from *nec*, *sive* from *utrum*. Account for the cases *sibi*, *itineris*, *tempestate*, *Pompeio*.

II. Translate into Latin:—

About fifty years after the flood which happened in the days of Deucalion, Clymenus, a descendant of the Idaean Hercules, came from Crete to Olympia and celebrated games there. When after many years these games had fallen into disuse, it happened that there was much war and suffering throughout Greece. Iphitus, king of Elis, that he might bring back prosperity to his subjects, asked the oracle at Delphi what was to be done. The answer was that the games formerly held at Olympia must be renewed. Iphitus took care to obey the divine command; after holding the games, he arranged that they should be kept every fifth year in the same manner as before.

III. Grammar.

1. Give the meaning, gender, abl. sing., and gen. pl. of—fons, arbiter, genus, consul, sedile, carcer, amnis, iter, nullus, praesens.

2. Give the meanings and principal parts of the verbs—proficio, veho, cogo, audeo, veto, mordeo, pasco, metior, tollo, enitor.

3. Compare—gravis, niger, audax; saepe, diu, pie. Give the Latin for 745; in the thousand and fiftieth year.

4. What constructions are used with the verbs—abripio, pareo, indigeo, utor; with the adjectives—gratus, memor, dignus, plenus; and with the conjunctions—quoniam, utinam?

IV. Sentences.

(*a*) The soldiers of the tenth legion said that they would follow their commander.

(*b*) The centurions besought him not to give battle at once.

(*c*) Soldiers who have so often been victorious, are not men to be easily dismayed by a sudden danger.

(*d*) If he reaches the town first, he will give hope to his friends.

(*e*) Not even you can doubt what the issue (*eventus*) of this battle is likely to be.

Monday, 1st April 1895.—9 *to* 12 *o'clock.*

I. Translate into English :—

The Death of Hannibal at the Court of Prusias, King of Bithynia.

Quae dum in Asia geruntur, accidit casu ut legati Prusiae Romae apud T. Quintium Flamininum consularem cenarent, atque ibi de Hannibale mentione facta ex his unus diceret eum in Prusiae regno esse. Id postero die Flamininus senatui detulit. Patres conscripti, qui Hannibale vivo nunquam se sine insidiis futuros existimarent, legatos in Bithyniam miserunt, in his Flamininum, qui ab rege peterent, ne inimicissimum suum secum haberet sibique dederet. His Prusias negare ausus non est : illud recusavit ne id a se fieri postularent, quod adversus ius hospitii esset : ipsi, si possent, comprehenderent : locum, ubi esset, facile inventuros. Tum Hannibal, cum se undique ab hostibus obsideri neque sibi diutius vitam esse retinendam sensisset, memor pristinarum virtutum, venenum, quod semper secum habere consuerat, sumpsit.

Why are *existimarent* and *peterent* in the Subjunctive? Write from *ipsi si possent* to *inventuros* in the words of Prusias (Oratio Recta).

II. Translate into Latin :—

While staying at Alexandria, the king resolved to visit the famous oracle of Ammon in the Libyan desert. With a picked corps of troops he marched for five days across the sands, and came in safety to the palm groves of the fertile spot which sheltered the temple of the god. The oracle hailed him as the son of Jupiter, and bade him go forth and conquer all the world, for none should be able to withstand him till the day when he should be taken up to the gods. His companions were bidden salute him as divine, and offer him sacrifice. This excessive flattery seems to have been the first thing which turned the head of Alexander.

III. Grammar.

1. Give ablative singular, genitive plural, gender and meaning of : *acus, bos, crus, dolor, flumen, faber, margo, paries, onus, senex.*

2. Give the principal parts (with meanings) of the verbs : *acuo, findo, corripio, ĕdo, ēdo, noceo, verro, sentio, ludo, opperior.*

3. Compare *liber, benevolus, alacer, novus.* Form adverbs from : *mutuus, audax, difficilis.* Distinguish the meaning of : *copia, copiae ; sal, sales ; ludus, ludi.*

4. Make short sentences to shew the cases used with : *excello, potior, circumdare, exuere.* What is the difference between : *non nemo* and *nemo non ;* and between *quisquis, quisque* and *quisquam.*

IV. Sentences.

Translate into Latin :—

(*a*) Tell me, please, what o'clock it is.
(*b*) The cold is so severe that many animals are perishing of hunger.
(*c*) Having written his letter, the boy went out to play.
(*d*) If we do our duty, fortune will favour us.
(*e*) The cruel emperor said: "Let them hate, provided they fear."

GREEK.

Higher Standard.

Wednesday, 3rd October 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Translate into English :—

Ὡς δὲ τῆς Ἑλλάδος ἐδόκουν ἐγγὺς γίγνεσθαι, ἤδη μᾶλλον ἢ πρόσθεν εἰσήει αὐτοὺς ὅπως ἂν καὶ ἔχοντές τι οἴκαδε ἀφίκωνται. ἠγήσαντο οὖν, εἰ ἕνα ἕλοιντο ἄρχοντα, μᾶλλον ἂν ἢ πολυαρχίας οὔσης δύνασθαι τὸν ἕνα χρῆσθαι τῷ στρατεύματι καὶ νυκτὸς καὶ ἡμέρας, καὶ εἴ τι δέοι λανθάνειν, μᾶλλον ἂν κρύπτεσθαι, καὶ εἴ τι αὖ δέοι φθάνειν, ἧττον ἂν ὑστερίζειν· οὐ γὰρ ἂν λόγων δεῖν πρὸς ἀλλήλους, ἀλλὰ τὸ δόξαν τῷ ἑνὶ περαίνεσθαι ἄν. ὡς δὲ ταῦτα διενοοῦντο, ἐτράποντο ἐπὶ τὸν Ξενοφῶντα· καὶ οἱ λοχαγοὶ ἔλεγον προσιόντες αὐτῷ ὅτι ἡ στρατιὰ οὕτω γιγνώσκει, καὶ εὔνοιαν ἐνδεικνύμενος ἕκαστος ἐπείθεν αὐτὸν ὑποστῆναι τὴν ἀρχήν. ὁ δὲ Ξενοφῶν τῇ μὲν ἐβούλετο ταῦτα, νομίζων καὶ τὴν τιμὴν μείζω οὕτως ἑαυτῷ γίγνεσθαι πρὸς τοὺς φίλους καὶ εἰς τὴν πόλιν τοὔνομα μεῖζον ἀφίξεσθαι αὐτοῦ, τυχὸν δὲ καὶ ἀγαθοῦ τινος ἂν αἴτιος τῇ στρατιᾷ γενέσθαι. τὰ μὲν δὴ τοιαῦτα ἐνθυμήματα ἐπῆρεν αὐτὸν ἐπιθυμεῖν αὐτοκράτορα γενέσθαι ἄρχοντα. ὁπότε δ' αὖ ἐνθυμοῖτο ὅτι ἄδηλον μὲν παντὶ ἀνθρώπῳ ὅπῃ τὸ μέλλον ἕξει, διὰ τοῦτο δὲ κίνδυνος εἴη καὶ τὴν προειργασμένην δόξαν ἀποβαλεῖν, ἠπορεῖτο.

2. Translate *one* of the following passages :—

(*a*) Οὐδὲ πυρὴ Πατρόκλου ἐκαίετο τεθνηῶτος.
ἔνθ' αὖτ' ἄλλ' ἐνόησε ποδάρκης δῖος Ἀχιλλεύς·
στὰς ἀπάνευθε πυρῆς δοιοῖς ἠρᾶτ' ἀνέμοισιν,
Βορρῇ καὶ Ζεφύρῳ, καὶ ὑπέσχετο ἱερὰ καλά·
πολλὰ δὲ καὶ σπένδων χρυσέῳ δέπαϊ λιτάνευεν
ἐλθέμεν, ὄφρα τάχιστα πυρὶ φλεγεθοίατο νεκροί,
ὕλη τε σεύαιτο καήμεναι. ὦκέα δ' Ἶρις
ἀράων ἄϋουσα μετάγγελος ἦλθ' ἀνέμοισιν.
οἱ μὲν ἄρα Ζεφύροιο δυσαέος ἀθρόοι ἔνδον
εἰλαπίνην δαίνυντο· θέουσα δὲ Ἶρις ἐπέστη
βηλῷ ἔπι λιθέῳ. τοὶ δ' ὡς ἴδον ὀφθαλμοῖσιν

πάντες ἀνήϊξαν, κάλεόν τέ μιν εἰς ἕ ἕκαστος·
ἡ δ' αὖθ' ἕζεσθαι μὲν ἀνήνατο, εἶπε δὲ μῦθον·
"οὐχ ἕδος· εἶμι γὰρ αὖτις ἐπ' Ὠκεανοῖο ῥέεθρα,
Αἰθιόπων ἐς γαῖαν, ὅθι ῥέζουσ' ἑκατόμβας
ἀθανάτοις, ἵνα δὴ καὶ ἐγὼ μεταδαίσομαι ἱρῶν.
ἀλλ' Ἀχιλεὺς Βορέην ἠδὲ Ζέφυρον κελαδεινὸν
ἐλθεῖν ἀρᾶται, καὶ ὑπίσχεται ἱερὰ καλά,
ὄφρα πυρὴν ὄρσητε καήμεναι, ἦ ἔνι κεῖται
Πάτροκλος, τὸν πάντες ἀναστενάχουσιν Ἀχαιοί.'

(*b*) ΑΜΦΙΤΡΥΩΝ.

Χρόνον δὲ πῶς τοσοῦτον ἦσθ' ὑπὸ χθονί ;

ΗΡΑΚΛΗΣ.

Θησέα κομίζων ἐχρόνισ' ἐξ Ἄιδου, πάτερ.

ΑΜΦΙΤΡΥΩΝ.

καὶ ποῦ 'στιν ; ἦ γῆς πατρίδος οἴχεται πέδον ;

ΗΡΑΚΛΗΣ.

βέβηκ' Ἀθήνας νέρθεν ἄσμενος φυγών.
καὶ νῦν ἴωμεν, ὦ τέκν', εἰς δόμους ὁμοῦ.
καλλίονες τἄρ' εἴσοδοι τῶν ἐξόδων
πάρεισιν ὑμῖν. ἀλλὰ θάρσος ἴσχετε
καὶ δάκρυ' ὅσσων μηκέτ' ἐξανίετε,
σύ τ', ὦ γύναι μοι, ξύλλογον ψυχῆς λαβέ,
τρόμου τε παῦσαι, καὶ μέθεσθ' ἐμῶν πέπλων·
οὐ γὰρ πτερωτός, οὐδὲ φευξείω φίλους.
ἄ,
οἵδ' οὐκ ἀφιᾶσ', ἀλλ' ἀνάπτονται πέπλων
τοσῷδε μᾶλλον· ὧδ' ἄρ' ἦν ὑμῖν φόβος ;
ἄξω λαβών γε τούσδ' ἐπαρκούσῃ χερί,
ναῦς δ' ὥς, ἐφέλξω· καὶ γὰρ οὐκ ἀναίνομαι
θεράπευμα τέκνων. πάντα τἀνθρώπων ἴσα.
φιλοῦσι παῖδας οἵ τ' ἀμείνονες βροτῶν
οἵ τ' οὐδὲν ὄντες. χρήμασιν δὲ διάφοροι·
ἔχουσιν, οἱ δ' οὔ· πᾶν δὲ φιλότεκνον γένος.

Wednesday, 3rd October 1894.—12 *to* 2 *o'clock.*

SECOND PAPER.

1. Give the stems of χέρνιψ, Ἄρτεμις, χάρις, δράκων, Ξενοφῶν.

Give gen. sing. of τύλμα, ἄστυ, Ἡρακλῆς, and acc. sing. and plur. of ἱερεύς, ἥρως.

What are the positives corresponding to the following comparatives ἀλγίων, ἐλάττων, θάττων. ἀμείνων, γεραίτερος ?

2. Parse *συντειχιοῦντες, καθῆσο, ἐρρύησαν, ἀνοικτέον, ἀπηύρων.*

Give the futures, aorists, and perfects in use of the verbs *μάχομαι, τίκτω, κλαίω, ἐσθίω, ἀνδάνω.*

What cases are governed by *ὠφελεῖν, βοηθεῖν, ἅπτεσθαι, ἀφαιρεῖν, προσήκειν?*

3. Distinguish *φαίνεται ὤν* and *φαίνεται εἶναι*: *δέδοικα μὴ ἔλθῃς* and *δέδοικα μὴ οὐκ ἔλθῃς*: *εἴθε ἴδοιμι* and *εἴθ' ὤφελον ἰδεῖν*: *εἴ τις κλέπτοι, ἐκολάζετο* and *εἴ τις κλέπτοι, κολάζοιτο ἄν.*

Express in Greek by the idiomatic use of prepositions:—In the archonship of Euclides, as far as is in our power, day by day, three at a time, by the gods I beseech you.

Distinguish *σίγα* and *σῖγα, δῆλοι* and *δηλοῖ, εἶδος* and *εἰδός, σύν* and *σῦν, φυγών* and *φυγῶν.*

4. Translate into Greek:—

(*a*) I should like to know how many there are of the enemy, and where they are from.

(*b*) We must consider which of the two is most likely (*μέλλειν*) to benefit his country.

(*c*) They found fault with Pericles on the ground that he had persuaded them to go to war.

(*d*) He was not the man to allow himself to be insulted (*ὑβρίζειν*) with impunity.

(*e*) Some one asked Socrates who was the wisest man in the world, and whether any one was wiser than he.

(*f*) I hope to take the city within five days without loss of life.

(*g*) We sent ambassadors to inquire on what terms they were willing to negotiate (*λόγους ποιεῖσθαι*).

(*h*) You, wise as you are, would be the better for learning what you do not know.

(*i*) They pass a law that nobody shall be allowed to hold office (*ἄρχειν*), who has not served in the army (*στρατεύεσθαι*).

(*k*) I will now go hence to the king, and will return when I have accomplished (*διαπράττομαι*) the purpose for which I was sent.

Wednesday, 3rd April 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

I. Translate into English:—

(*Demosthenes praises the Athenians of old for resisting the Persians.*)

Ἐκεῖνοι τὸν ἐξ ἁπάσης τῆς Ἀσίας στόλον ἐλθόντα μόνοι δὶς ἠμύναντο καὶ κατὰ γῆν καὶ κατὰ θάλατταν, καὶ διὰ τῶν ἰδίων κινδύνων κοινῆς σωτηρίας πᾶσι τοῖς Ἕλλησιν αἴτιοι κατέστησαν. καὶ προείρηται μὲν δ μέλλω λέγειν ὑπ' ἄλλων πρότερον, δεῖ δὲ μηδὲ νῦν τοῦ δικαίου καὶ καλῶς ἔχοντος ἐπαίνου τοὺς ἄνδρας ἐκείνους στερηθῆναι. τοσούτῳ γὰρ ἀμείνους

τῶν ἐπὶ Τροίαν στρατευσαμένων νομίζοιντ' ἂν εἰκότως, ὅσον οἱ μὲν ἐξ ἁπάσης τῆς Ἑλλάδος ὄντες ἀριστεῖς[1] δέκ' ἔτη τῆς Ἀσίας ἓν χωρίον πολιορκοῦντες μόλις εἷλον, οὗτοι δὲ τὸν ἐκ πάσης τῆς ἠπείρου στόλον ἐλθόντα μόνοι, τἆλλα πάντα κατεστραμμένον, οὐ μόνον ἠμύναντο, ἀλλὰ καὶ τιμωρίαν ὑπὲρ ὧν τοὺς ἄλλους ἠδίκουν ἐπέθηκαν. μηδεὶς δ' ἡγείσθω με ἀποροῦντα ὅτι χρὴ περὶ τούτων εἰπεῖν ἑκάστου, ταῦτα τὰ πραχθέντα ἀπηριθμηκέναι. εἰ γὰρ ἁπάντων ἀμηχανώτατος ἦν ὅτι χρὴ λέγειν πορίσασθαι, ἡ ἐκείνων ἀρετὴ πολλὰ καλὰ δίδωσιν αὐτὴ εἰπεῖν καὶ πρόχειρα, ἃ ῥᾴδιον μέν ἐστι διελθεῖν. ἀλλὰ προαιροῦμαι τῆς εὐγενείας καὶ τῶν παρὰ τοῖς προγόνοις μεγίστων μνησθεὶς ὡς τάχιστα συνάψαι τὸν λόγον πρὸς τὰ τοῖσδε πεπραγμένα.

[1] ἀριστεῖς, "the chiefs."

II. Translate *one* of the following passages :—

(*a*) (*Meeting of Rhesus and Hector.*)

ΡΗ. χαῖρ', ἐσθλὸς ἐσθλοῦ παῖ, τύραννε τῆσδε γῆς,
Ἕκτορ· παλαιᾷ σ' ἡμέρᾳ προσεννέπω.
χαίρω δέ σ' εὐτυχοῦντα καὶ προσήμενον
πύργοισιν ἐχθρῶν· συγκατασκάψων δ' ἐγὼ
τείχη πάρειμι καὶ νεῶν πρήσων σκάφη.

ΕΚ. παῖ τῆς μελῳδοῦ μητέρος, Μουσῶν μιᾶς,
Θρηκός τε ποταμοῦ Στρυμόνος, φιλῶ λέγειν
τἀληθὲς ἀεὶ κοὐ διπλοῦς πέφυκ' ἀνήρ.
πάλαι πάλαι χρὴν τῇδε συγκάμνειν χθονὶ
ἐλθόντα, καὶ μὴ τοὔπι σ' Ἀργείων ὕπο
Τροίαν ἐᾶσαι πολεμίων πεσεῖν δορί.
οὐ γάρ τι λέξεις ὡς ἄκλητος ὢν φίλοις
οὐκ ἦλθες οὐδ' ἤμυνας οὐδ' ἐπεστράφης.
τίς γάρ σε κῆρυξ ἢ γερουσία Φρυγῶν
ἐλθοῦσ' ἀμύνειν οὐκ ἐπέσκηψεν[1] πόλει ;
σὺ δ' ἐγγενὴς ὢν βάρβαρός τε βαρβάρους
Ἕλλησιν ἡμᾶς προὔπτιες[2] τὸ σὸν μέρος.

[1] enjoin. [2] pledge away, sacrifice.

(*b*) (*How Agamemnon met his death on his return.*)

ἦ τοι ὁ μὲν χαίρων ἐπεβήσετο πατρίδος αἴης,
καὶ κύνει ἁπτόμενος ἣν πατρίδα· πολλὰ δ' ἀπ' αὐτοῦ
δάκρυα θερμὰ χέοντ', ἐπεὶ ἀσπασίως ἴδε γαῖαν.
τὸν δ' ἄρ' ἀπὸ σκοπιῆς εἶδε σκοπός, ὅν ῥα καθεῖσεν
Αἴγισθος δολόμητις ἄγων, ὑπὸ δ' ἔσχετο μισθόν,
χρυσοῦ δοιὰ τάλαντα· φύλασσε δ' ὅγ' εἰς ἐνιαυτόν,
μή ἑ λάθοι παριών, μνήσαιτο δὲ θούριδος ἀλκῆς.
βῆ δ' ἴμεν ἀγγελέων πρὸς δώματα ποιμένι λαῶν.
αὐτίκα δ' Αἴγισθος δολίην ἐφράσσατο τέχνην·
κρινάμενος κατὰ δῆμον ἑείκοσι φῶτας ἀρίστους,
εἷσε λόχον, ἑτέρωθι δ' ἀνώγει δαῖτα πένεσθαι.

αὐτὰρ ὁ βῆ καλέων Ἀγαμέμνονα, ποιμένα λαῶν,
ἵπποισιν καὶ ὄχεσφιν, ἀεικέα μερμηρίζων.
τὸν δ' οὐκ εἰδότ' ὄλεθρον ἀνήγαγε, καὶ κατέπεφνεν
δειπνίσσας, ὡς τίς τε κατέκτανε βοῦν ἐπὶ φάτνῃ.

Wednesday, 3rd April 1895.—12 *to* 2 *o'clock.*

SECOND PAPER.

I. Sentences.

Write in Greek :—

(1) What is your object in acquiring still more money, and not being content with (ἀγαπᾶν with dat.) what your father left you?

(2) If any one had made war on the king of the Persians, his empire, large though it was, would have been too weak to offer a long resistance (ἀνθίστασθαι).

(3) Would that you had lived in the days of Socrates, that you might have learned how to converse on all subjects that it concerns a man to know.

(4) Surely it is not like a philosopher to condemn a man to death without a trial (ἄκριτος), or to forbid an accused person to speak in his own defence.

(5) The generals began to deliberate whether it would be wiser to attack the enemy at once, or to wait till the rest of the army arrived.

(6) The priest bade Alexander go forth and conquer all the world ; for no one would ever be able to prevail against him.

II. Grammar.

1. Give the genitive singular, the dative and accusative plural of πένης, πρέσβυς, ἀνῶριάς, γέρας, φρήν. Compare ὑγιής, ἁπλοῦς, ἰσχυρός, προῦργου, πρῴ. Give the meaning and one example of (1) the substantive suffixes -σις, -τρον, -εἰον ; (2) of the adjective suffixes -ινος and -εις.

2. Parse and conjugate δεδιώς, ὀμεῖ, ἠπίστω, τεθνήξει, τετάχαται. Give the meaning of the following verbs (1) in the Active Voice, (2) in the Middle or Passive, stating the cases governed in either Voice : ἀπαλλάττειν, γαμεῖν, λανθάνειν, μιμνήσκειν.

3. Give Greek for : contrary to expectation ; in the presence of the people ; as far as I know ; the king must be obeyed ; to swear by all the gods ; I wish I had not said so. Exemplify the meanings of ἀπὸ and μετὰ in composition. Distinguish by accent two words in ἀγων, οἶκοι, δεινος, εἰπε.

4. Translate and give a short explanation of the cases : πόσου διδάσκεις ; ζηλῶ σε τῆς σοφίας : τοῦτ' ἐμοὶ ἡδομένῳ ἐστίν : ἐπιτεταμμένος τὴν ἀρχήν : Ὀλύμπια νικᾶν. Translate with a remark on the negatives : (1) μὴ λαλήσῃς, (2) οὐ μὴ λαλήσῃς, (3) ἐὰν μὴ λαλήσῃς, δίκην οὐ δώσεις.

Lower Standard.

Saturday, 29th September 1894.—3 *to* 6 *o'clock.*

I. Translation.

Translate into English :—

Ἀκούω τινὰ διαβάλλειν,[1] ὦ ἄνδρες, ἐμὲ ὡς ἐγὼ ἄρα ἐξαπατήσας[2] ὑμᾶς μέλλω ἄγειν εἰς Φᾶσιν. ἀκούσατε οὖν μου πρὸς θεῶν, καὶ ἐὰν μὲν ἐγὼ φαίνωμαι ἀδικεῖν, οὐ χρή με ἐνθένδε ἀπελθεῖν πρὶν ἂν δῶ δίκην· ἂν δ' ὑμῖν φαίνωνται ἀδικεῖν οἱ ἐμὲ διαβάλλοντες, οὕτως αὐτοῖς χρῆσθε ὥσπερ ἄξιον. ὑμεῖς δὲ ἴστε δήπου ὅθεν ἥλιος ἀνίσχει καὶ ὅπου δύεται, καὶ ὅτι ἐὰν μέν τις εἰς τὴν Ἑλλάδα μέλλῃ ἰέναι, πρὸς ἑσπέραν δεῖ πορεύεσθαι· ἢν δέ τις βούληται εἰς τοὺς βαρβάρους, τοὔμπαλιν πρὸς ἕω. ἔστιν οὖν ὅστις τοῦτο ἂν δύναιτο ὑμᾶς ἐξαπατῆσαι, ὡς ἥλιος ἔνθεν μὲν ἀνίσχει, δύεται δὲ ἐνταῦθα; ἀλλὰ μὴν καὶ τοῦτό γε ἐπίστασθε ὅτι βορέας μὲν ἔξω τοῦ Πόντου εἰς τὴν Ἑλλάδα φέρει, νότος δὲ εἴσω εἰς Φᾶσιν, καὶ λέγεται ὅταν βορρᾶς πνέῃ, ὡς καλοὶ πλοῖ εἰσὶν εἰς τὴν Ἑλλάδα. τοῦτ' οἶν ἔστιν ὅπως τις ἂν ὑμᾶς ἐξαπατήσαι ὥστε ἐμβαίνειν ὁπόταν νότος πνέῃ; ἀλλ' οὗτοί εἰσιν οἱ λόγοι ἀνδρῶν ἐμοὶ φθονούντων,[3] ὅτι ἐγὼ ὑφ' ὑμῶν τιμῶμαι.

Parse ἕω, Ἑλλάδα, βορρᾶς, πλοῖ.

Parse ἀκούσατε, δῶ, χρῆσθε, ἴστε, ἐξαπατήσαι, πνέῃ giving the chief tenses of the verbs.

[1] διαβάλλειν, 'to slander.' [2] ἐξαπατᾶν, 'to deceive.'
[3] φθονεῖν, 'to envy.'

II. Grammar.

1. Give the gen. sing. and gender of ἄνθος, ἰσχύς, ἔαρ, πειθώ, ἕως.
Form nominatives from γαλακτ-, γενεσ-, δορατ-, γιγαντ-, πολιτιδ-.
Decline εἷς and the sing. of τίς, πολύς, γέρας.
Compare ἡδέως, εὐκλεῶς, μάλα, ταχέως, ὑψέ, πέπων, τλήμων, μέλας, μάκαρ, ὀλίγος.

2. Parse ὤφελε, ὦφλε, ἔλαχον, ἔλαθον, ἐδείξαντο, ἐδέξαντο, ἀλῶναι, κατερράγη, ἡμαρτημένα, προεῖτο.
Give the futures, aorists, and perfects in use of the verbs—τρέχω, πνέω, δάκνω, πέτομαι, πήγνυμι.

3. Write out in full :—
(*a*) the imperf. ind. of φημί.
(*b*) the imperf. ind. of ἧμαι.
(*c*) the 2nd aor. imperat. act. of ἵστημι.
(*d*) the pres. opt. of εἰμί.
(*e*) the perf. ind. of κτῶμαι.

Form :—
(*a*) the perf. pass. inf. of ὠθῶ, σπένδω.
(*b*) the 2nd sing. fut. ind. of ᾄδω, ἐκνίζω.

(*c*) the 3rd sing. 2nd aor. imperat. act. of *τίθημι, καθίημι.*
(*d*) the 1st plur. aor. opt. act. of *φαίνω, δουλῶ.*
(*e*) the 3rd sing. pluperf. act. of *λείπω, στέλλω.*

4. Give the meaning of the following expressions :—*ἐπὶ σοὶ ἔσται ἀκοῦσαι—ὁ θεὸς πρὸς ἡμῶν ἐστίν—ἐπὶ Κορίνθου πλεῖν—ὑπὲρ ἄνθρωπον φρονεῖν—παρὰ φύσιν ζῆν.*

III. Sentences.

1. We suffer the same things as our fathers at the hands of the enemy.

2. There is nothing he would not do for the sake of money.

3. It is the part of a good citizen to sacrifice (*προῖεσθαι*) his life for his country.

4. I pity (*οἰκτείρω*) him, though he has done so much harm.

5. This being so, is it not better to die nobly (*γενναίως*) than to fly?

6. I am afraid that if I keep quiet (*ἡσυχίαν ἄγειν*), I may seem to be a coward (*δειλός*).

7. Ask him to give you a better gift than he promised (*ὑπισχνοῦμαι*).

Saturday, 30th March 1895.—3 *to* 6 *o'clock.*

I. Translate into English :—

Thrasybulus defeats the thirty tyrants.

Ταῦτα δ' εἰπὼν καὶ μεταστραφεὶς πρὸς τοὺς ἐναντίους ἡσυχίαν εἶχε· καὶ γὰρ ὁ μάντις παρήγγελλεν αὐτοῖς μὴ πρότερον ἐπιτίθεσθαι, πρὶν τῶν σφετέρων ἢ πέσοι τις ἢ τρωθείη· ἐπειδὰν μέντοι τοῦτο γένηται, ἡγησόμεθα μέν, ἔφη, ἡμεῖς, νίκη δ' ὑμῖν ἔσται ἑπομένοις, ἐμοὶ μέντοι θάνατος, ὥς γέ μοι δοκεῖ. καὶ οὐκ ἐψεύσατο, ἀλλ' ἐπεὶ ἀνέλαβον τὰ ὅπλα, αὐτὸς μὲν ὥσπερ ὑπὸ μοίρας τινὸς ἀγόμενος ἐκπηδήσας πρῶτος ἐμπεσὼν τοῖς πολεμίοις ἀποθνήσκει, καὶ τέθαπται ἐν τῇ διαβάσει τοῦ Κηφισοῦ· οἱ δ' ἄλλοι ἐνίκων καὶ κατεδίωξαν μέχρι τοῦ ὁμαλοῦ.[1] ἀπέθανον δ' ἐνταῦθα τῶν μὲν τριάκοντα Κριτίας καὶ Ἱππόμαχος, τῶν δ' ἐν Πειραιεῖ δέκα ἀρχόντων Χαρμίδης ὁ Γλαύκωνος, τῶν δ' ἄλλων περὶ ἑβδομήκοντα. καὶ τὰ μὲν ὅπλα ἔλαβον, τοὺς δὲ χιτῶνας οὐδενὸς τῶν πολιτῶν ἐσκύλευσαν.[2] ἐπεὶ δὲ τοῦτο ἐγένετο καὶ τοὺς νεκροὺς ὑποσπόνδους ἀπεδίδοσαν, προσιόντες ἀλλήλοις πολλοὶ διελέγοντο.

[1] *τὸ ὁμαλόν*, "level ground." [2] *σκυλεύειν*, "to strip."

II.

1. Parse and conjugate *μεταστραφείς, πέσοι, τρωθείη, ἐψεύσατο, ἀποθνήσκει, τέθαπται, ἐνίκων.*

2. Give the nominative singular neuter of the perfect participle active of *εἶχε, παρήγγελλεν, ἀνέλαβον*; write out in full the 2nd aorist subjunctive active of *τίθημι, ἵστημι*, and the present subjunctive of *εἶμι.*

3. Write, with article, the dative and accusative plural of *μάντις, γυνή, βοῦς, οἶς, ναῦς, ὁδός*; give accusative singular and dative plural of *ἀνήρ, παῖς, πόλις, κέρας, ποιμήν, δελφίς, φρέαρ, νεώς, ἥρως.*

4. Give the nominative and genitive singular neuter of *πολύς, μέγας, μέλας, διδούς, γραφείς.*

5. Compare *κοῦφος, ῥᾴδιος, ὀλίγος, σαφής, πέπων, ταχύς.*

6. Give, in full, the genitive singular and the accusative plural of *τίς* and *ὅστις.*

7. What are the cases governed by *ἀντί, διά, ὑπέρ, περί*, and with what meanings?

III. Translate into Greek :—

(*a*) Socrates was the wisest of all men.
(*b*) I fear all these things more than I do the enemy.
(*c*) Cyrus first crossed the river, and then entered the city.
(*d*) If I had known that, I should not have gone.
(*e*) I shall guard your interests (*τὰ σά*) so that no one may injure you.

MATHEMATICS.

Intermediate and Higher Standards.

Thursday, 4th October 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Show that two triangles ABC, $A'B'C'$ are congruent (equal in every respect) when $A=A'$, $B=B'$, and $BC=B'C'$.

State the various ways in which a right-angled triangle may be determined by means of its sides and angles.

OY is a fixed straight line and A a fixed point. If P move on OY and AQ be equal to AP and perpendicular to AP, find the locus of Q.

2. Prove that two tangents to a given circle and no more can be drawn from an external point; and give (without proof) the construction for the common tangent to two non-intersecting circles.

A and B are fixed points. P and Q are the points of contact of tangents drawn from B to two circles having A for centre: show that P and Q are always equidistant from a certain fixed point.

3. Show (without assuming any other proposition regarding the segments of chords of a circle) that the rectangle contained by the segments of any chord of a circle passing through O is equal to the difference between the squares on the radius and on the distance of O from the centre. State Euclid's form of this theorem for an external point.

Show how to construct a circle having a given radius which shall pass through a given point and touch a given straight line.

4. How many conditions are required to secure that two plane quadrilaterals be similar?

Show that two triangles are similar when one angle of the one is equal to one angle of the other and the sides about these angles proportional.

D and E are points on the side BC of a triangle ABC, F and G points on CA and AB respectively, and H a point on BF. If AH and FG be parallel to BC, and AD and FE perpendicular to BC, show that the triangles EFG and HAD are similar.

5. Explain what is meant by *exact divisibility* as applied to integral functions of a single variable; and define the G.C.M. of two such functions.

Find the G.C.M. of the integral functions

$$4x^4-8x^3-149x^2+18x+315$$

and

$$4x^3+28x^2-9x-63:$$

and find the values of x for which their L.C.M. becomes zero.

6. Simplify

$$\left(1-\frac{b^2+c^2-a^2}{2bc}\right)\left(1+\frac{(a+b+c)(b+c-a)}{(a-b+c)(a+b-c)}\right),$$

and find the value of

$$\frac{x(4-x)}{x(x-3)+1}+\frac{2-x(4-x)}{4-x},$$

when $x=(\sqrt{3}+1)\div(\sqrt{3}-1)$.

7. Solve the equations—

(i.) $$\frac{x+a}{x+a-b}+\frac{x+3a}{x+3a-b}=2;$$

(ii.) $$\frac{5}{x-a}+\frac{5}{x+a}=\frac{8}{x}+\frac{1}{x-2a}+\frac{1}{x+2a};$$

(iii.) $x+xy=2m$, $y+xy=m+1$.

8. Define *ratio* and *proportion*; and show that if a, b, c, d are in proportion, then

$$a+b:a-b=c+d:c-d.$$

If $7x-y:3x-y=11x-5y:y-x$, find the ratio of x to y.

9. Define the *sine* and *tangent* of an angle; and prove the formula

$$\sin\alpha=\pm\tan\alpha/\sqrt{(1+\tan^2\alpha)}.$$

Show that the triangle whose sides are $\sqrt{6}$, $\sqrt{2}+1$, $\sqrt{2}-1$ is right-angled; and find (i.) the tangent of the smallest angle, (ii.) the length of the perpendicular from the right angle on the hypotenuse, (iii.) the area of the triangle.

Thursday, 4th October 1894.—12 *to* 1.30 *o'clock.*

SECOND PAPER.

1. Show that the bisectors of the internal and external vertical angles of a triangle divide the base in the ratio of the sides.

The bisector of the angle A meets BC in D. I and J are points on AB such that $DI=DJ=DC$; show that $IJ=(c^2-b^2-a^2)/(b+c)$, the angle C being obtuse.

2. Show that a series of parallel planes divide all transversals in the same ratio.

Two planes are drawn each through three vertices of a cube so as to cut off two diametrically opposite corners; show that these planes are paraliel, and find the distance between them in terms of the edge of the cube.

3. Explain or illustrate the difference between an *Identity* and a *Conditional Equation*; and also the meaning of a *Solution of a Conditional Equation.*

Factorise $4x^2+12x+4$.

Determine numerical values for A, B, C, D so that

$$2x^3-13x^2+26x-14 \equiv A(x-1)(x-2)(x-5)+B(x-1)(x-2)+C(x-1)+D$$

may be an identity.

4. Show that if $a^2=bc$, then $(b^2-ca)^3+(c^2-ab)^3$ can be expressed as the square of a rational function of certain of the letters a, b, c.

5. Prove the formulae:

(i.) $$\frac{\sin\alpha+\cos\alpha+1}{\sin\alpha+\cos\alpha-1}-\frac{1+\sin\alpha-\cos\alpha}{1-\sin\alpha+\cos\alpha}=2(1+\operatorname{cosec}\alpha);$$

(ii.) $$\frac{\cos 2\beta-\cos 2\alpha}{\sin 2\alpha+\sin 2\beta}=\tan(\alpha-\beta).$$

6. Assuming the formula for the cosine of an angle of a triangle in terms of the sides, establish the following:—

(i.) $$\tan\frac{A}{2}=\sqrt{\left(\frac{(s-b)(s-c)}{s(s-a)}\right)};$$

(ii.) $c(a\cos B-b\cos A)=a^2-b^2$.

Use the formula (i.) to find to the nearest second the greatest angle of the triangle whose sides are 175, 150, 125; given

$\log 2=\cdot3010300$, $\log 3=\cdot4771213$,

$\log\tan 39^\circ 13'=\bar{1}\cdot9117245$; diff. for $1'=2579$.

Thursday, 4th April 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

[*The pass mark for Intermediate Candidates is fixed with reference to the total number of marks assigned to questions which fall under the Syllabus for the Intermediate Standard; but such Candidates will receive credit for any question they may answer.*

1. In a straight line PQ to find a point R so that $PQ \cdot QR = PR^2$.

If on PQ, divided as above, a square $PQST$ be constructed, and PT be bisected in W, show that WOT is an isosceles triangle, and PO is perpendicular to TR, O being the point of intersection of WQ and TR.

2. PQR, XYZ are two triangles similar to one another. Enuntiate and prove what is known regarding their relative areas.

ABC is a circle, DA a tangent, DBC a secant. DA is $2\frac{1}{4}$ feet, DB $1\frac{1}{2}$ feet, and the area of ADB is a square foot. What is the area of ABC?

3. When is a straight line perpendicular to a plane?

To draw a straight line at right angles to a plane from a given point without it.

Shew that this is the least line which can be drawn from the point to the plane.

4. Find the whole number which is nearest to the square root of the fraction

$$\frac{63{\cdot}329 \times 34789{\cdot}92}{119{\cdot}9}.$$

5. Prove that

$$(x+y+\sqrt{1+x^2})(1+y^2-2y\sqrt{1+x^2})(x-y-\sqrt{1+x^2}) = (2xy-y^2+1)(y^2+2xy-1).$$

Divide $x^6+3\sqrt{6}x^3+1$ by $x^2+\sqrt{6}x+1$.

6. Solve

(i.) $$\frac{x-a}{x-3a}-\frac{x-b}{x-b-2a}=\frac{x-3b+3a}{x-b+a}-\frac{x-3b+4a}{x-b+2a}.$$

(ii.) $$\frac{1}{2-x}+\frac{1}{1+y}=\frac{4}{3};\quad \frac{2}{2-x}+\frac{3}{1+y}=3.$$

7. A and B begin to play with £5 each. A loses the first stake, which is a certain fraction of what he has: he also loses the second stake, which is the same fraction of what he has left, and then gains 4s. He has now a quarter of what B has. What was the amount of the first stake?

Or, as an alternative,

Windsor is 32 miles from London by river. By rowing half way and walking half way I can go from Windsor to London in 6 hours, from

London to Windsor in 8 hours. Had there been no current, either journey would have taken 6 hrs. 40 min. Find the speed of the Thames.

8. If $\sin A = \cos 6A$, find one value of A.

Verify $\dfrac{1-2\sin\theta\cos\theta}{\cos^2\theta-\sin^2\theta} = \dfrac{1-\tan\theta}{1+\tan\theta}$.

9. Prove that in any triangle $\cos\dfrac{C}{2} = \sqrt{\dfrac{s(s-c)}{ab}}$,

where $s = \frac{1}{2}(a+b+c)$.

Shew what this reduces to when $c^2 = a^2 + b^2$.

If $a = 56$, $b = 65$, $c = 33$, find B.

Thursday, 4th April 1895.—12 *to* 1.30 *o'clock.*

SECOND PAPER.

[*The pass mark for Intermediate Candidates is fixed with reference to the total number of marks assigned to questions which fall under the Syllabus for the Intermediate Standard; but such Candidates will receive credit for any question they may answer.*]

1. A tangent is drawn to a circle, and from the point of contact a chord is drawn dividing the circle into two unequal segments. Shew that the acute angle between the chord and tangent is equal to the angle in the larger segment.

Two circles touch one another internally at A, and a chord BPC of the outer circle touches the inner at P; shew that AP bisects the angle BAC.

2. State and prove the relations that exist among the sides of triangles that are equiangular to each other.

AB, CD are diameters of a circle at right angles to each other. BPQ is a straight line meeting the circle in P and CD in Q. Shew that $CP.DP = BP.QP$.

3. Prove that, if two integral functions (expressions) of x have a common factor, it divides the sum and the difference of any integral multiples of the two functions.

Find the condition that must exist among p, q, b, c, in order that x^2+bx+c and x^2+px+q may have a common factor of the form $x+a$.

4. If $\dfrac{a}{b} = \dfrac{c}{d} = \dfrac{e}{f}$, then each is equal to $\dfrac{pa+qc+re}{pb+qd+rf}$.

If $\dfrac{a+bx}{b+cy} = \dfrac{b+cx}{c+ay} = \dfrac{c+ax}{a+by}$, then in general each is equal to $\dfrac{1+x}{1+y}$.

Why is this not true when $a=2$, $b=-5$, $c=3$, $x=2/3$, $y=3$?

5. Solve—

(i.) $\dfrac{1}{7(x-3)(x-2)}+\dfrac{x-4}{(x-1)(x-3)}-\dfrac{x-3}{(x-1)(x-2)}=0.$

(ii.) $x^2+3xy=7,\ xy+3y^2=14.$

Or, as an alternative to (ii.)—

Find the four pairs of roots of

$$(3x-4y+5)(x+7y-2)=0$$
$$(2x+y-3)(9x-8y)=0.$$

6. Find all the values of θ, not exceeding 180°, which satisfy

$$\frac{\sin\theta}{1+\cos\theta}=2-\cot\theta.$$

The horizontal distance between two towers is 60 feet, and the angular depression of the top of the first as seen from the top of the second, which is 150 feet high, is 30°. What is the height of the first?

7. Find geometrically $\cos(A-B)$ in terms of sines and cosines of A and B, when A and B are acute angles, and A greater than B.

If $\sin\alpha=\dfrac{8}{17}$, $\cos\beta=\dfrac{40}{41}$, find $\cos(\alpha-\beta)$.

Lower Standard.

Monday, 1st October 1894.—2 *to* 5 *o'clock.*

1. Find the value of

$$\frac{\cdot0168(3\cdot678914-2\cdot5342)}{\cdot001634}$$

to three places of decimals.

2. Two bottles contain substances A, B, C, D dissolved in water as follows:—

No. 1. 1 oz. of A, 6 grains of B, and 6 oz. of C, with water to make up a volume of 50 fluid ounces.

No. 2. 5 oz. of D with water to make up 50 fluid ounces.

A mixture is made by taking one volume from No. 1, and one volume from No. 2 together with one volume of water. Calculate the number of grains of A, B, C, and D respectively in an ounce of this mixture (given 1 oz. avoirdupois = $437\frac{1}{2}$ grains).

3. A cargo of tea is bought at 2s. per lb. One-eighth of the cargo is lost at sea; at what price per lb. must the remainder be sold to realise 10 per cent. of profit on the whole venture?

4. State the Algebraical *Law of Distribution.*

Find the coefficient of x^3 in the product

$$(x-1)(x-2)(x-3)(x-4)(x-5).$$

Expand and arrange

$$(x+a)^2(x^2+b^2-c^2)+(x+b)^2(x^2+c^2-a^2)+(x+c)^2(x^2+a^2-b^2)$$

according to powers of x.

5. Express

$$\frac{\dfrac{x-1}{(x-2)(x-3)}-\dfrac{x-2}{(x-1)(x-3)}}{\dfrac{(x-2)}{(x-1)(x-3)}-\dfrac{x-3}{(x-1)(x-2)}}$$

as a rational fraction at its lowest terms.

For what numerical values of p can the fraction

$$\frac{2px^2+(3p+4)x+7}{(x+1)(x+2)}$$

be reduced to lower terms?

6. Resolve $(x-1)(x-2)^2-(x-1)^3$ into factors of the first degree.

Find *all* the roots of the following equations :—

(i.) $$x^3-x^2-2x=0\ ;$$

(ii.) $$(x+b+c)(x+b-c)+(x+c+a)(x+c-a)+(x+a+b)(x+a-b)=0.$$

7. Solve the system

$$\frac{p-q}{p+q}x+\frac{p+q}{p-q}y=2\frac{p^2+q^2}{p^2-q^2},$$
$$x+y=2.$$

At the present time A owes B £100, the debt having been outstanding for ten years. B owes A £206, 5s., which is payable eight years hence. Show that the two obligations will cancel each other after a certain number of years, if we suppose that A allows B simple interest at the rate of 5 per cent. per annum during the whole time that the £100 was due, and also discount (so called "true discount") on the £206, 5s. at the same rate of simple interest. (Find the number of years.)

8. Show that any two sides of a triangle are together greater than the third.

If ABC be three points such that $AB+BC=AC$, what inference can you draw regarding their relative positions!

Show that any median of a triangle is less than half the sum of the two sides that meet in the corresponding vertex. (Median means line from vertex to middle point of opposite side.)

9. Show that parallelograms on the same base and between the same parallels are equal in area; and deduce a rule for calculating the area of a triangle.

ABCD is a square, and *EAB*, *FBC*, *GCD*, *HDA* equilateral triangles described externally on its sides. If the length of *AB* be three feet, calculate to three places of decimals the area of the quadrilateral *EFGH*.

10. Show how to construct a square whose area shall be equal to the area of a given rectangle.

Show how to divide a given straight line both externally and internally, so that the rectangle contained by its segments shall be equal to a given square.

11. Prove that the external angle of any quadrilateral inscribed in a circle is equal to the interior opposite angle.

Two equal circles *S* and *T* touch externally at *A*. *C* and *D* are points on *S* and *T* respectively: *CA* meets *T* in *E* and *DA* meets *S* in *F*; show that *FE* is parallel to *CD*.

12. If two circles touch each other, show that the line joining their centres passes through the point of contact.

A and *B* are two fixed points: find the locus of the points of contact of circles passing through *A* and *B*, with circles which have *A* for centre.

Monday, 1st April 1895.—2 *to* 5 *o'clock.*

1. Simplify $\dfrac{\frac{1}{3}+\cdot 3}{\frac{1}{30}-\cdot 03} \div \dfrac{\cdot 4+\frac{1}{4}}{\cdot 04-\frac{1}{40}}$.

Explain why certain vulgar fractions cannot be expressed as terminating decimals, and why the digits in the corresponding decimals must recur.

2. *A* can give *B* 20 yards start in a 100 yards race, and *B* can give *C* 10 yards start in a 100 yards race. If *A* gives *C* 30 yards start in a 100 yards race, by how much will *C* win?

3. If a merchant sells goods to a retail dealer at a profit of 40 per cent., and the retail dealer, becoming bankrupt, pays only 12s. 6d. in the £, how much per cent. does the merchant lose?

4. The total area of the six faces of a cube is 1 sq. ft. $40\frac{8}{18}$ sq. in. Find the length of one edge.

5. If $2s=a+b+c$, reduce to its simplest form $s(s-b)(s-c)+s(s-c)(s-a)+s(s-a)(s-b)-(s-a)(s-b)(s-c)$.

Divide $a^2(b-c)+b^2(c-a)+c^2(a-b)$ by $a^2-a(b+c)+bc$.

6. Reduce to its simplest form

$$\frac{\frac{x}{c}+\frac{c}{x}-2}{x-c}+\frac{\frac{x}{c}+\frac{c}{x}+2}{x+c}.$$

Factorise $(a^2+b^2+1+ab+a+b)^2-(ab+a+b)^2$.

Find 4 values of a for which $6x^2+ax-35$ is resolvable into factors of the first degree in x whose coefficients are integral numbers. State how many more such values of a could be found by your method.

7. Solve the equations :—

(i.) $6x+\frac{1}{y}=10=12x-\frac{1}{2y}$.

(ii.) $\frac{x+6}{x+1}-\frac{5-x}{2x}=\frac{15}{8}$.

Or, as an alternative to (ii.),

Find an equation of the first degree in two variables x and y such that when $x=2$, $y=5$, and when $x=9$, $y=-3$.

8. In an examination 11 out of every 13 candidates who entered passed ; but of the failures 18 were due to candidates leaving without giving in a paper. Had 9 of these stayed and succeeded in passing, then 10 out of every 11 candidates entered would have passed. How many candidates were there?

9. Prove that, if two triangles have the three sides of the one repectively equal to the three sides of the other, they must be congruent (*i.e.*, equal in every respect).

$PQRS$ is a quadrilateral ; $PQ=RS$ and $PR=QS$. Prove that the angle QPS=the angle RSP, and that, if QS, PR meet in O, $PO=OS$.

10. The sum of the interior angles of a triangle is equal to two right angles.

The angle contained by the bisectors of two adjacent angles of a quadrilateral is equal to half the sum of the remaining angles.

11. If a straight line be divided externally, the sum of the squares on the two segments is greater than the square on the line by twice the rectangle contained by the segments.

Hence deduce, without any construction, that, if a straight line AB be bisected in O, and divided externally in C, then the squares on AC and BC are together double the squares on OB and OC.

Or, as an alternative to the latter part of this question,

Deduce from the former part that the square on the sum of two straight lines exceeds the square on their difference by four times the rectangle contained by the lines.

12. Prove that the angle in a semicircle is a right angle, the angle in a segment greater than a semicircle is less than a right angle, and the angle in a segment less than a semicircle is greater than a right angle.

$ABCD$ are four given points in a straight line. Find a point P such that the angle APB shall be equal to the angle CPD.

Or, as an alternative to the latter part of the question,

$ABCD$ is a straight line. On AB, CD as diameters, two circles are described. A direct common tangent is drawn to the two circles, meeting them in X and Y. Shew that AX is parallel to CY.

FRENCH.

Tuesday, 2nd October 1894.—3 *to* 4.30 *o'clock.*

FIRST PAPER.

Translate into French :—

(*a*) In one of the streets of Vienna a blind beggar used to sit every evening and play upon the violin. Beside him sat his dog, holding a cap in his mouth, and passers-by would often take pity on the blind man, and drop some pennies into his cap. But one night he had played for a long time without getting anything, and he began to think he would have to go to bed without supper. He felt so sad that he stopped playing. A gentleman came up and spoke to him. "You are tired playing," he said. "Give me your violin, and I will play a little while for you." The blind man gave it to him. The stranger tuned it and began to play. He had only played a few notes when a crowd began to gather, and so sweetly did he play that not one of the crowd moved away till the music stopped. Then every man of them dropped some money into the beggar's cap ; which at last grew so heavy that the dog could scarcely hold it. It was the greatest musician in Vienna who had played for the old man. He earned enough that night to pay for many suppers.

(*b*) 1. You have grown very much since I saw you last. 2. He is hardly old and strong enough to be a soldier. 3. Tell me quite frankly what I have done to offend you. 4. You will have to get up early to-morrow if you wish to come with us. 5. They met a superior force, but succeeded in breaking through. 6. There was nobody who dared to stop him. 7. Though they were running as fast as they could, they arrived too late.

Thursday, 4th October 1894.—3 *to* 5 *o'clock.*

SECOND PAPER.

I. Translate into English :—

(*a*) Ainsi coulèrent mes jours heureux, et d'autant plus heureux que, n'apercevant rien qui les dût troubler, je n'envisageais en effet leur fin qu'avec la mienne. Ce n'était pas que la source de mes soucis fût absolument tarie ; mais je lui voyais prendre un autre cours que je dirigeais de mon mieux sur des objets utiles, afin qu'elle portât son remède avec elle. Maman aimait naturellement la campagne, et ce goût ne s'attiédissait pas en moi. Peu à peu elle prit celui des soins champêtres ; elle aimait à faire valoir les terres, et elle avait sur cela des connaissances dont elle faisait usage avec plaisir. Non contente de ce qui dépendait de la maison qu'elle avait prise, elle louait tantôt un champ, tantôt un pré. Enfin, portant son humeur entreprenante sur des

objets d'agriculture, au lieu de rester oisive dans sa maison, elle prenait le train de devenir bientôt une grosse fermière. Je n'aimais pas trop à la voir ainsi s'étendre, et je m'y opposais tant que je pouvais, bien sûr qu'elle serait toujours trompée, et que son humeur libérale et prodigue porterait toujours la dépense au delà du produit : toutefois je me consolais en pensant que ce produit du moins ne serait pas nul, et lui aiderait à vivre. De toutes les entreprises qu'elle pouvait former, celle-là me paraissait la moins ruineuse, et, sans y envisager comme elle un objet de profit, j'y envisageais une occupation continuelle, qui la garantirait des mauvaises affaires et des escrocs.

J. J. Rousseau.

(*b*) Chacun fait des châteaux en Espagne,
On en fait à la ville ainsi qu'à la campagne ;
On en fait en dormant, on en fait éveillé.
Le pauvre paysan, sur sa bêche appuyé,
Peut se croire un moment seigneur de son village ;
Le vieillard oublier les glaces de son âge ;
Un commis est ministre ; un jeune abbé prélat ;
Le prélat... Il n'est point jusqu'au simple soldat
Qui ne se soit un jour cru maréchal de France ;
Et le pauvre lui-même est riche en espérance :
Et chacun redevient Gros-Jean comme devant.
Eh bien ! chacun du moins fut heureux en rêvant !
C'est quelque chose encor que de faire un beau rêve ;
A nos chagrins réels c'est une utile trêve ;
Nous en avons besoin : nous sommes assiégés
De maux, dont à la fin nous sommes surchargés
Sans ce délire heureux qui se glisse en nos veines.
Flatteuse illusion, doux oubli de nos peines,
Oh ! qui pourrait compter les heureux que tu fais ?
L'espoir et le sommeil sont de moindres bienfaits,
Délicieuse erreur, tu nous donnes d'avance
Le bonheur que promet seulement l'espérance.
Le doux sommeil ne fait que suspendre nos maux,
Et tu mets à la place un plaisir. En deux mots,
Quand je songe, je suis le plus heureux des hommes.
Et dès que nous croyons être heureux, nous le sommes.

Collin d'Harleville.

II. Grammar :—

1. Give the substantives, with their meaning, corresponding to *six* of the following verbs : *vendre*, *fuir*, *croire*, *mentir*, *lire*, *écrire*, *voler*, *craindre*, *conduire*, *pleuvoir;* and the verbs, with their meaning, corresponding to *six* of the following adjectives and substantives ; *blanc*, *rond*, *fleur*, *goût*, *tendre*, *jeu*, *jour*, *doux*, *nouveau*, *terre*.

2. Show, by examples, when the relative pronouns *qui* and *lequel* are to be used.

3. State the different meaning expressed by : *croyez-vous qu'il a dit la vérité?* and *croyez-vous qu'il ait dit la vérité*, and explain logically the use of the negative particle *ne* in the following affirmative sentences : *j'ai peur qu'il ne vienne : il sera parti avant que vous ne soyez arrivé ; il aura fini plus tôt que vous ne croyez.*

4. Distinguish, as to meaning, between *user quelque chose* and *user de quelque chose ;* between *douter* and *se douter ;* between *tandis que* and *pendant que* (English *whilst*) ; between *campagne, pays, patrie, contrée* (English *country*) ; between *à son arrivée le dîner était servi* and *à son arrivée le dîner fut servi.*

5. Mention the cases in which the English language uses the ordinal whilst the French language uses the cardinal numerals.

6. Is there any difference of meaning between *un malheur est arrivé* and *il est arrivé un malheur ;* between *César fut un grand général* and *ce fut un grand général que César?* When is the one or the other construction preferred? Explain also the use of the dative case in *il lui a pris son chapeau*, and the active infinitive *tuer* -where the English language uses the passive form—in *il l'a fait tuer.*

III. Philology and Literature :—

(One *only of the following questions is to be attempted.*)

1. Comment on the French way of expressing 70, 80, 90. What other forms did the older language possess for these numbers? Give the etymology of the suffix -ième (ordinal numerals), and of *mil* and *mille*, and say when each form is used now and was used formerly.

2. Explain etymologically the form and meaning of *any ten* of the following words taken from the above two passages :—*heureux, rien, envisager, attiédir, plaisir, penser, profit, affaire, ville, seigneur, soldat, chacun, oubli, sommeil.*

3. Explain why the French language has abandoned the Latin neuter gender. How have the Latin neuter substantives been treated in the French language? Explain the double gender and the double meaning of *page, livre, voile.*

4. Characterise the writings of Chateaubriand, *or* Lamartine, *or* Victor Hugo. Give a short account of *one* of the works of the author whom you select for criticism.

5. Give your views on the merits and defects of French prose and verse.

6. What were, broadly speaking, the tendencies of the French prose writers of the second half of the eighteenth century?

Tuesday, 2nd April 1895.—3 *to* 4.30 *o'clock.*

FIRST PAPER.

Translate into French :—

(*a*) For my part, I was not allowed to do anything; the captain ordered that I should be bound to the mast; and when at last the flames were extinguished, the passengers, with one accord, besought him to keep me bound hand and foot, lest I should be the cause of some new disaster. All that had happened was, indeed, occasioned by my ill-luck. I had laid my pipe down, when I was falling asleep, upon the bale of cotton that was beside me. The fire from my pipe fell out and set the cotton on fire. Such was the mixture of rage and terror with which I had inspired the whole crew, that I am sure they would have set me ashore on a desert island rather than have had me on board for a week longer. Even my humane master, I could perceive, was secretly impatient to get rid of me and my evil fortune. So you may believe that I was heartily glad when we landed, and when I was unbound. My master put a purse containing five pounds into my hand, and bade me farewell.

(*b*) 1. If you want that apple, you must jump for it. 2. He is the most obstinate fellow I know. 3. I have not read the papers yet; what is the news? 4. Do not walk so fast; I cannot follow you. 5. He likes nobody but himself. 6. They had gone so far, that they only returned when the clock struck ten. 7. If I were as rich as he, how I should enjoy myself! 8. What has happened to him? He looks so sad.

Thursday, 4th April 1895.—3 *to* 5 *o'clock.*

SECOND PAPER.

I. Translate in English :—

(*a*) Il ne faudrait pas croire cependant que, du moment où cet homme sortit de la famille pour apparaître au peuple, il ait été tout de suite et par acclamation accepté pour chef. Les choses ne vont jamais ainsi d'elles-mêmes. Où le génie se lève, l'envie se dresse. Bien au contraire, jusqu'à l'heure de sa mort, jamais homme ne fut plus complètement et plus constamment nié dans tous les sens que Mirabeau. Lorsqu'il arriva comme député d'Aix aux états-généraux, il n'excitait la jalousie de personne. Obscur et mal famé, les bonnes renommées s'en inquiétaient peu; laid et mal bâti, les seigneurs de belle mine en avaient pitié. La noblesse disparaissait sans l'habit noir, sa physionomie sous la petite-vérole. Qui donc eût songé à être jaloux de cette espèce d'aventurier, repris de justice, difforme de corps et de visage, ruiné d'ailleurs, que les petites gens d'Aix avaient député aux états-généraux

dans un moment de fièvre et par mégarde sans doute et sans savoir pourquoi. Cet homme, en vérité, ne comptait pas. Le premier venu était beau, riche et considérable à côté de lui. Il n'offusquait aucune vanité ; il ne gênait les coudées d'aucune prétention. C'était un chiffre quelconque que les ambitions qui se jalousaient comptaient à peine dans leurs calculs.—VICTOR HUGO.

(*b*) L'Egypte ! Elle étalait, toute blonde d'épis,
Les champs, bariolés comme un riche tapis,
Plaines que des plaines prolongent ;
L'eau vaste et froide au nord, au sud le sable ardent
Se disputent l'Egypte : elle rit cependant
Entre ces deux mers qui la rongent.

Trois monts bâtis par l'homme au loin perçaient les cieux
D'un triple angle de marbre, et dérobaient aux yeux
Leurs bases de cendre inondées ;
Et de leur faîte aigu jusqu'aux sables dorés,
Allaient s'élargissant leurs monstrueux degrés,
Faits pour des pas de six coudées.

L'astre roi se couchait. Calme à l'abri du vent,
La mer réfléchissait ce globe d'or vivant,
Ce monde, âme et flambeau du nôtre ;
Et dans le ciel rougeâtre et dans les flots vermeils,
Comme deux rois amis, on voyait deux soleils
Venir au-devant l'un de l'autre.—VICTOR HUGO.

II. GRAMMAR.

(1) Mention the cases where the auxiliary *être* is used in the conjugation of French verbs.

(2) When is the English *this* to be translated by *ce* (*cet*, *cette*, *ceci*, *celui-ci*? Form sentences to illustrate your answers.

(3) Explain fully the agreement and non-agreement in the past participles of the following sentences : Les années que j'ai vécu ici ; les années que j'ai passées ici ; la dame que j'ai vu peindre ; la dame que j'ai vue peindre ; la faute qu'il a faite ; la chaleur qu'il a fait ; ils se sont vus ; ils se sont parlé.

(4) (*a*) Il s'est couvert de gloire ; (*b*) défauts de jeunesse ; (*c*) ils perdirent la tête ; (*d*) il se rappela le fait ; (*e*) il se souvint du fait ; (*f*) le chemin de Londres. Give the reasons as well as the rules—why in (*a*) and (*b*) the definite article is omitted with abstract nouns ; why in (*c*) *tête* is used in the singular ; why in (*d*) and (*e*) *se rappeler* takes the accusative and *se souvenir* the genitive ; why in (*f*) the preposition *de* is used for the English *to*.

(5) Give the adverbial forms of the following adjectives: *cher, bas, poli, courant*, and the feminine substantives corresponding to: *empereur, serviteur, neveu, écolier.*

III. Philology and Literature.

(*Only one of the following questions is to be attempted.*)

(1) Explain the origin (*a*) of the so-called euphonic *t*; (*b*) of the letter *s* in the first person of the singular of the imperfect indicative; (*c*) of the two classes of verbs in *-ir.*

(2) Explain etymologically the form and meaning of any ten of the following words taken from the above two passages: *suite, chef, seigneur, songer, visage, gêner, leur, cependant, être, jaloux, aucun, soleil, assez, coudée, abri.*

(3) Describe the position Molière occupies in regard to the history of French comedy. Give an account of any one of his plays that you may have read.

(4) Characterise the writings of Voltaire, or J. J. Rousseau, or Montesquieu, or Béranger.

GERMAN.

Wednesday, 3rd October 1894.—3 *to* 4.30 *o'clock.*

FIRST PAPER.

Translate into German:—

(*a*) During these mighty changes Britain had been at war with the United States of America. The British claimed the right of searching American vessels for seamen to serve in the royal navy; the Americans resisted; and hence the war arose. It lasted for nearly three years. The Americans made an unsuccessful attack on Canada. British soldiers burned the public buildings of Washington, but were repulsed with loss from New Orleans. Of the many naval engagements between single ships, the chief was that between the frigates Shannon and Chesapeake, in which the British were victorious. The Peace of Ghent, signed in December 1814, put an end to the war, but without deciding the original ground of quarrel.

(*b*) 1. Whether he is right or wrong you must decide yourself. 2. He said that it was quite impossible for him to be ready in time. 3. He would not believe me, though I told him that I had seen it with my own eyes. 4. The battle was over and the enemy defeated after two hours' fighting. 5. If you have nothing else to do, come and read the newspaper to me. 6. He looks always so sad now; do you know the reason? 7. No, and I almost think he hardly knows it himself.

Friday, 5th October 1894.—9 *to* 11 *o'clock.*

SECOND PAPER.

I. Translate into English :—

(*a*) Durch furchtbare Erfahrungen belehrt gingen die Römer über zu einem verständigerem System der Kriegführung, stellten nur erprobte Offiziere an die Spitze ihrer Armeen und ließen dieselben, wenigstens wo es noth that, auf längere Zeit bei dem Kommando. Diese Feldherren sahen weder den feindlichen Bewegungen von den Bergen herab zu, noch warfen sie sich auf den Gegner wo sie ihn eben fanden, sondern, die rechte Mitte zwischen Zauderei und Vorschnelligkeit haltend, stellten sie in verschanzten Lagern unter den Mauern der Festungen sich auf und nahmen den Kampf da an, wo der Sieg zu Resultaten, die Niederlage nicht zur Vernichtung führte. Die Seele dieser neuen Kriegführung war Marcus Claudius Marcellus. Mit richtigem Instinct hatten nach dem unheilvollen Tag von Cannae Senat und Volk auf diesen tapfern und krieggewohnten Mann die Blicke gewandt, und ihm den factischen Oberbefehl übertragen. Er hatte in dem schwierigen sicilischen Kriege gegen Hamilkar seine Schule gemacht und in den letzten Feldzügen gegen die Kelten sein Führertalent wie seine persönliche Tapferkeit glänzend bewährt. Obwohl ein hoher Fünfziger brannte er doch vom jugendlichsten Soldatenfeuer und hatte erst wenige Jahre zuvor als Feldherr den feindlichen Feldherrn vom Pferde gehauen—der erste und einzige römische Konsul, dem eine solche Waffenthat gelang.

Mommsen.

(*b*) **Zuversicht.**

Wohlauf! es ruft der Sonnenschein
Hinaus in Gottes freie Welt!
Geht munter in das Land hinein,
Und wandert über Berg und Feld.

Es bleibt der Strom nicht ruhig stehen,
Gar lustig rauscht er fort;
Hörst Du des Windes muntres Wehen?
Er braust von Ort zu Ort.

Es reist der Mond wohl hin und her,
Die Sonne ab und auf,
Blickt über'n Berg und geht in's Meer,
Nie matt in ihrem Lauf.

Und, Menſch, du ſitzeſt ſtets daheim,
Und ſehnſt dich nach der Fern;
Sei friſch und wandle durch den Hain
Und ſieh die Fremde gern.

Laß Sorgen ſein und Bangigkeit!
Iſt doch der Himmel blau!
Es wechſelt Freude ſtets mit Leid—
Dem Glücke nur vertrau'.

Tieck.

II. Grammar.

1. Illustrate the various constructions of the following German verbs and adjectives by translating the examples affixed to each:—

ſterben: he died of hunger, she died a terrible death.
denken: we think of him.
warten: wait for me, will you nurse me?
gelten: he was considered a rich man.
lachen: he laughs at the enemy.
bitten: he asks me for advice.
ſchuldig: he is guilty of this crime, you owe him five pounds.
reich: rich in treasures.

2. State the classes of verbs which form their compound tenses by means of "ſein," and show the difference of meaning in—

Ich bin fortgefahren and Ich habe fortgefahren.
Er iſt zum Regiment geſtoßen and Er hat an den Tiſch geſtoßen.
Wir ſind übergeſetzt and Wir haben überſetzt.

3. When are the following verbs separable and when inseparable: übertreten, unterhalten, hintergehen, umgehen, umſchreiben, wiederholen? Distinguish as to the different accentuation and meaning.

4. State when the English *if*, *but*, *when*, are to be translated respectively by wenn, ob; aber, ſondern; als, wann, wenn. Form sentences to illustrate your answers.

5. Translate into German, using the verbs gehorchen, helfen, folgen—I am obeyed, he cannot be helped, he will be followed.

6. Add the definite article and give the nominative plural of the following substantives: Hoffnung, Käſig, Kalb, Krankheit, Doktor, Held, Geſellſchaft, Handſchrift, Gebirge.

III. Philology and Literature.

(One *only of the following questions is to be attempted.*)

1. (*a*) Form verbs from—ſchwarz, Durſt, offen, Blatt, rein.
   (*b*) Form adjectives from—Kind, Holz, Dank, hören, Wald.
   (*c*) Form substantives from—jagen, ſchreiben, krank, artig.
   (*d*) Form adverbs from—recht, Abend, blind.

2. Explain the different formations of the plural in the following groups of analogous substantives:—Der Tag, die Tage; der Schlag, die Schläge; der Graf, die Grafen. Das Wort, die Wörter and die Worte; das Herz, die Herzen. Die Stadt, die Städte; die That, die Thaten.

3. Contrast the poetical genius of Klopstock and Wieland, and describe the position each occupied in regard to the history of German literature.

4. Describe the origin and tendency of the so-called „Sturm- und Drangperiode." In which of Schiller's works are found direct traces of that school? Give some account of that work.

5. Characterise the lyric poetry of Schiller and of Goethe.

Wednesday, 3rd April 1895.—3 *to* 4.30 *o'clock.*

FIRST PAPER.

Translate into German:—

(*a*) John Moore was born at Glasgow in the year 1761. Very early in life he had made up his mind to be a soldier; and when he entered the army he was only fifteen years of age. His first great feat of arms was performed in the island of Corsica. Here, in the attack on the fort of Calvi, he headed a splendid bayonet charge; and, though severely wounded, pressed on gallantly, and at length succeeded in storming the fort. When he returned to England, he was made a Knight of the Bath, and was henceforth known as Sir John Moore. In 1808, during the Peninsular War, he was sent out to help the Spaniards in their struggle with the French. He found great difficulties in his way; for the Spanish troops were cowardly, badly drilled, and wretchedly organised. They were almost useless to him; and when the French with a large force pressed upon him, he was forced to retreat across the peninsula.

(*b*) 1. He said he could not come so soon. 2. Have you decided whether you will come with us or not? 3. He was so ill that everybody thought he would die. 4. I told him that he was wrong. 5. He came running up as fast as he could. 6. As soon as he opens a book, he falls asleep. 7. Amongst all his friends there is not one he can trust. 8. If this is your opinion, you need not be proud of it,

Friday, 5th April 1895.—9 *to* 11 *o'clock.*

SECOND PAPER.

I. Translate into English :—

(*a*) Das Wetter ist unglaublich und unsäglich schön, den ganzen Februar bis auf vier Regentage ein reiner, heller Himmel, gegen Mittag fast zu warm. Nun sucht man das Freie, und wenn man sich bisher nur mit Göttern und Helden abgeben mochte, so tritt die Landschaft auf einmal wieder in ihre Rechte, und man heftet sich an die Umgebungen, die der herrliche Tag belebt. Manchmal erinnere ich mich, wie der Künstler im Norden den Strohdächern und verfallenen Schlössern etwas abzugewinnen sucht, wie man sich an Bach und Busch und zerbröckeltem Gestein herumdrückt, um eine malerische Wirkung zu erhaschen, und ich komme mir ganz wunderbar vor, um so mehr als jene Dinge nach so langer Gewohnheit einem noch immer ankleben; nun habe ich mir aber seit vierzehn Tagen einen Mut gefaßt und bin mit kleinen Blättern hinausgegangen, durch die Tiefen und Höhen der Villen, und habe mir, ohne viel Besinnens, kleine, auffallende, wahrhaft südliche und römische Gegenstände entworfen, und suche nun, mit Hilfe des guten Glücks, ihnen Licht und Schatten zu geben. Es ist ganz eigen, daß man deutlich sehen und wissen kann, was gut und besser ist; will man sich's aber zueignen, so schwindet's gleichsam unter den Händen, und wir greifen nicht nach dem Rechten, sondern nach dem, was wir zu fassen gewohnt sind. Goethe.

(*b*) An den Rhein, an den Rhein, zieh nicht an den Rhein,
Mein Sohn ich rate dir gut!
Da geht dir das Leben zu lieblich ein,
Da blüht dir zu freudig der Mut.

Siehst die Mädchen so krank und die Männer so frei,
Als wär' es ein adlig Geschlecht;
Gleich bist du mit glühender Seele dabei:
So dünkt es dich billig und recht.

Und zu Schiffe wie grüßen die Burgen so schön
Und die Stadt mit dem ewigen Dom!
In den Bergen, wie klimmst du zu schwindelnden Höhn
Und blickst hinab in den Strom!

Und im Strome, da tauchet die Nix aus dem Grund,
Und hast du ihr Lächeln gesehn
Und sang dir die Lurlei mit bleichem Mund,
Mein Sohn so ist es geschehn.

Dich bezaubert der Laut, dich bethört der Schein,
Entzücken faßt dich und Graus:
Nun singst Du nur immer: „Am Rhein, am Rhein,"
Und kehrst nicht wieder nach Haus.

Simrock.

II. Grammar.

1. Translate into English: er soll krank sein; er will ihn gesehen haben; es lebt sich schlecht allein; aufgegessen! er wird uns vergessen haben. Add to each case a few explanatory remarks.

2. Translate into German: He spoke of going to Germany; I know him to be an honest man; travelling is expensive; the art of painting.

3. Give as nearly as you can the different shades of meaning expressed by the adverbs in the following sentences: Sie werden mich ja doch wohl kennen; er ist doch nicht etwa gar krank.

4. State and exemplify the rules concerning the declension of proper names of persons, countries, and places.

5. What forms are used for was governed by a preposition? Translate into German: what are you thinking of? State the difference between welches große Schiff and welch großes Schiff.

III. Philology and Literature.

(*Only one of the following questions is to be attempted.*)

1. Give the derivation and meaning of: Spruch, Tracht, Brand, Ankunft, Kunst, Schlacht, Macht, Gruft, Flucht, Gewand.

2. Explain philologically (*a*) the modified vowels in the German declension and conjugation; (*b*) the different declension of the German adjective when used alone or with the definite article.

3. Describe the tendencies of the romantic school. Mention the chief representatives of that school, and give an account of what you may have read of any of them.

4. Give some account of the German ballad poetry and its chief representatives, or of the poetry of the German war of liberation. Describe what you have read in either of these two branches of poetry.

DYNAMICS.

Friday, 5th October 1894.—1 *to* 4 *o'clock.*

[Take $g = 32$ feet per second.]

1. Define *velocity* and *change of velocity*. Explain what is meant by resolving a velocity into two components. Show how to determine the

direction of a velocity, being given its magnitude, the directions of its two components, and the magnitude of one of the components.

A velocity of $10\sqrt{3}$ feet per second vertically upwards is resolved into two components of which one is 10 feet per second in a given horizontal direction. Find the magnitude and direction of the other component.

2. Distinguish between (i.) *mass* and *weight*, (ii.) *momentum* and *force*, (iii.) *poundal* and *weight of a pound*. A mass of 8 oz. is moving at the rate of 38 yards per minute; what is its momentum? If the mass has acquired this momentum in 15 seconds under the action of a force constant in magnitude and direction, what is the magnitude of the force? In what units are your answers expressed?

3. Prove the equation of work and energy for the case of a particle moving in a straight line under the action of a constant force.

A train, moving at the rate of 30 miles per hour, is brought to rest by a constant horizontal resistance in 200 yards. Compare the resistance with the weight of the train.

4. Show how to determine by geometrical construction the resultant of any number of given forces acting at a point.

Forces of 1, 2, 3, 4 units respectively act from the centre of a square towards the angular points of the square taken in order. Find the magnitude and direction of the resultant.

5. Define *moment of a force about a point*, and explain the convention regarding positive and negative moments.

Show that the algebraical sum of the moments of three parallel forces which are in equilibrium about any point in the plane of the forces is zero. AB is a weightless rod, 4 feet long. Masses of 3, 4, 5, 6, 7 lbs. are suspended from the rod, 3 lbs. being suspended at A, 4 lbs. at the point one foot from A, 5 lbs. at the middle point of the rod, 6 lbs. at the point three feet from A, and 7 lbs. at B. The rod remains horizontal when suspended by a string attached to some point C of its length. Find the position of C and the tension of the string.

6. Define *centre of gravity*, and show how to determine by experiment the centre of gravity of a thin plate.

ABC is an equilateral triangle whose sides are 18 inches long. AD, BE, CF, are the perpendiculars from A, B, C upon the opposite sides. If the triangle AEF be cut off, find the distance from D of the centre of gravity of the remainder of the triangle.

7. A body which is free to turn about a fixed point is acted on by forces in one plane; what is the condition of equilibrium of the body? If the body is in equilibrium, show how the pressure on the fixed point may be found.

A uniform rod which weighs 10 lbs. is hinged at one end to a fixed point round which it is free to turn in a vertical plane. It is drawn aside from the vertical position through an angle of 45°, and kept in

equilibrium by a horizontal force applied at its lower extremity. Find the magnitude of this force and the pressure on the hinge.

8. State the principle of Archimedes. Give *either* a theoretical proof of this principle, *or* an account of an experiment for its verification.

A piece of iron which weighs 10 lbs. in air and $8\frac{3}{4}$ lbs. in water floats mercury with $\frac{1}{7}$ of its volume above the surface. Find the specific gravity of mercury.

9. Show clearly how the height of the barometer is a measure of the atmospheric pressure. Does the height of the barometer depend on the bore of the barometric tube? Would the reading be affected if the tube were inclined to the vertical? State in each case your reasons for the answer you give.

If the height of the water barometer is 33 feet, find the atmospheric pressure in lbs. per square inch.

[A cubic foot of water may be taken to weigh 1000 oz.]

10. State Boyle's Law in the form of a relation between the pressure and the density of a gas. Two closed vessels, A and B, contain 500 and 100 cubic feet of air respectively. The pressure in A is that of 50 inches of mercury, and in B is that of 20 inches of mercury. If half the quantity of air in B were pumped into A, what would then be the pressures in the two vessels respectively?

Friday, 5th April 1895.—1 *to* 4 *o'clock.*

[*The acceleration due to gravity to be taken as* 32.]

1. Define velocity and change of velocity.

A point is moving in a N.E. direction with a velocity of 9 feet per second, and some minutes afterwards it is moving in a direction 15° W. of N. with a velocity of 18 feet per second. Find the change of velocity.

2. Prove that, where acceleration is uniform, the average velocity during any interval is half the sum of the velocities at the beginning and end of the interval: and deduce an expression for the space described in any time by a body moving from rest under a uniform acceleration.

A body starting from rest moves over 63 feet in the fourth second under uniform acceleration. Find the acceleration.

3. A body describes a circle with uniform velocity. Find its acceleration.

If a body attached to a light string revolve uniformly in a vertical circle of two feet radius, what must its velocity be in order that there may be no tension on the string when the body is at its highest point?

4. Enuntiate the III. Law of Motion, and explain its application in the case of a horse drawing a cart.

A mass of $1\frac{1}{2}$ tons placed on a smooth horizontal table has attached to it a light inextensible string passing over a frictionless pulley at the edge of the table, supporting a weight of 28 lbs., which hangs freely. Find the tension on the string, and how far the masses will move from rest in 2 seconds.

5. What are the laws of friction between two bodies in contact when relative motion is just about to begin?

A uniform ladder, 20 feet long, weighing 50 lbs., rests with one end on the ground, which is rough, $\mu = \cdot 4$; and the other end against a smooth vertical wall. The ladder is inclined to the horizon at an angle of 60°. A man weighing 150 lbs. commences to climb the ladder. How high will he go before it slips?

6. A weight of 20 lbs. is fastened by a string to a hook, and is pulled horizontally by another string fastened to the weight until the first string makes with the vertical an angle whose cosine is 4/5. What is the tension on each of the strings?

7. Define the moment of a force.

Prove that the sum of the moments of two forces acting upon a particle about any point in their plane is equal to the moment of their resultant about the same point.

ABC is any triangle, and forces of 4 and 5 lbs. respectively act at A along AB and AC. Find the point in BC about which the moments of the forces are equal.

Or, as an alternative to 7—

What are the requisites of a good balance?

How would you test if a balance be true?

When one of the scales of a balance is loaded (the balance being in other respects true), a body weighs 9 oz. in one pan and 10 oz. in the other. Find the true weight.

8. Find the relation between the power and the weight in the system of pulleys in which all the pulleys are arranged in two blocks, one block fixed, the other moveable: the same string going round all the pulleys, and all the strings being parallel.

In such a system, the string being fastened to the lower block, which weighs 6 lbs. and contains 3 pulleys, what power will be necessary to support a weight of 50 lbs.?

9. Define specific gravity.

How is the specific gravity of a solid body determined when the body sinks in water?

Two fluids of specific gravity 3 and 5 respectively are mixed together in equal volumes. Find the specific gravity of the mixture. If they are mixed together in equal weights, what is the specific gravity?

10. State Boyle's law for the pressure of a gas.

Three cubic centimetres of air are taken at atmospheric pressure, and

are introduced into the vacuum of a barometer standing at 76 centimetres. They are found to occupy a volume of 20 cubic centimetres. By how much has the mercurial column been depressed?

11. What are the conditions of equilibrium of a floating body?

A rectangular block of wood 3 feet long, 2 feet broad, and 1 foot deep, weighing 250 lbs., lies in a rectangular vessel 3 feet 2 inches long by 2 feet 1 inch broad. What weight of water must be poured into the vessel so that the wood may just float, taking one cubic foot of water as equal to 1000 oz.?

Additional Examination Papers for First Year Open Bursaries.

October 1894.

ENGLISH.

Friday, 28th September 1894.—9 *to* 12 *o'clock.*

(*Candidates are requested to name the Bursary or Bursaries for which they have entered.*)

1. Discuss, within the limit of two pages, and with strict attention to style, *one* of the following:—

(*a*) "Solitude is the school of Genius."—(*Gibbon.*)
"It is not good for a man to be, especially to work alone."

(*b*) Forgotten Genius.

(*c*) "I do but sing because I must,
And pipe but as the linnets sing."—(*Tennyson.*)
"No poet sings because he must sing. At least, no great poet does. A great poet sings because he chooses to sing."

2. Name and describe briefly the non-Christian Old English Poems.

3. What influence had Chaucer's writings on English and Scottish Literature before 1560?

4. What do you know of the imaginative prose literature of the reigns of Elizabeth and James I.?

5. What general impressions have you received from the writings of the Eighteenth Century, prose and verse, which you have read?

6. Discuss briefly, with reference to authors and writers, either of these phases of present-day literature:—The Short Tale *or* The Scots Vernacular in Fiction.

7. Add a brief descriptive note to each of the following:—*The Vision of Piers the Plowman*, *The Hous of Fame*, *The Kingis Quair*, *The Shepheardes Kalender*, *The Advancement of Learning*, *The Anatomy of Melancholy*, *Areopagitica*, *The Spectator*, *The Rape of the Lock*, *Lyrical Ballads*.

8. Define and exemplify these prosodic terms:—Blank Verse, Trochaic Trimeter, Caesura, Ballad Metre, Feminine ending.

9. Transcribe in modern English:—

He wæs swyde spedig mann on þæm æhtum þe heora speda on beoð, þæt is, on wildrum. He hæfde þagyt, ða he þone cyningc sohte, tamra deora unbebohtra syx hund. Þa deor hi hatað 'hranas'; þara wæron syx stælhranas; ða beoð swyðe dyre mid Finnum, for ðæm hy foð þa wildan hranas mid. He wæs mid þæm fyrstum mannum on þæm lande: næfde he þeah ma ðonne twentig hryðera, and twentig sceapa, and twentig swyna; and þæt lytle þæt he erede, he erede mid horsan. Ac hyra ar is mæst on þæm gafole þe ða Finnas him gyldað. Þæt gafol biþ on deora fellum, and on fugela feðerum, and hwales bane, and on þæm sciprapum, þe beoð of hwæles hyde geworht, and of seoles.

Or,

þus queþ Alured.
If þu hauest seorewe.
ne seye þu hit nouht þan arewe.
seye hit þine sadelbowe.
and ryd þe singinde forþ.
þenne wile wene.
þet þine wise ne con:
þat þe þine wise wel lyke.
serewe if þu hauest.
and þe erewe hit wot:
by-fore, he þe meneþ:
by-hynde he þe teleþ.
þu hit myht segge swyhc mon.
þat þe ful wel on.
wyþ-vte echere ore.
he on þe muchele more.
By-hud hit on þire heorte:
þat þe eft ne smeorte.
Ne let þu hyne wite.
al þat þin heorte by-wite.

Note.—*The punctuation of the second extract is metrical.*

10. In what ways has the English vocabulary been affected by French?

LATIN.

Saturday, 6th October 1894.—9 *to* 10.30 *o'clock.*

1. Translate into Latin prose :—

But great as he was in the council, he was even greater in the field. He stands alone amongst the masters of the art of war, as a captain whose victories began at an age when the work of most men is done. Though he served as a young officer under Turenne, and for a few months in Ireland and in the Netherlands, Marlborough had held no great command till he took the field in Flanders at the age of fifty-two. He stands alone, too, in his unbroken good fortune. Voltaire notes that he never besieged a fortress which he did not take, or fought a battle which he did not win. His difficulties indeed came not so much from the enemy as from the ignorance and timidity of his own allies.

J. R. Green.

2. Translate into English : —

Quo, quo scelesti ruitis? aut cur dexteris
aptantur enses conditi?
parumne campis atque Neptuno super-
fusum est Latini sanguinis,
non ut superbas invidae Karthaginis
Romanus arces ureret,
intactus aut Britannus ut descenderet
Sacra catenatus via,
sed ut secundum vota Parthorum sua
urbs haec periret dextera?
neque hic lupis mos nec fuit leonibus
nunquam nisi in dispar feris.
furorne caecus, an rapit vis acrior?
an culpa? responsum date!—
tacent et albus ora pallor inficit
mentesque perculsae stupent.
sic est: acerba fata Romanos agunt
scelusque fraternae necis,
ut immerentis fluxit in terram Remi
sacer nepotibus cruor.

GREEK.

Saturday, 6th October 1894.—10.30 *to* 12 *o'clock.*

1. Translate :—

οἱ δ' ἐκ τῆς Σάμου ἀπὸ τῶν τετρακοσίων πεμφθέντες πρέσβεις, ἀλλ' μενοις καὶ πρότερον τοὺς πολλοὺς τῶν μετεχόντων τῆς ὀλιγαρχίας καὶ ἥδεως ἂν ἀπαλλαγέντας πῃ ἀσφαλῶς τοῦ πράγματος πολλῷ δὴ μᾶλλον ἐπέρρωσαν.

καὶ ξυνίσταιτό τε ἤδη καὶ τὰ πράγματα διεμέμφοντο, ἔχοντες ἡγέμονας τῶν πάνυ στρατηγῶν τῶν ἐν τῇ ὀλιγαρχίᾳ καὶ ἐν ἀρχαῖς ὄντων, οἷον Θηραμένην τε τὸν Ἄγνωνος καὶ Ἀριστοκράτην τὸν Σκελλίου καὶ ἄλλους, οἳ μετέσχον μὲν ἐν τοῖς πρώτοις τῶν πραγμάτων, φοβούμενοι δ', ὡς ἔφασαν, τό τε ἐν τῇ Σάμῳ στράτευμα καὶ τὸν Ἀλκιβιάδην σπουδῇ πάνυ ; τούς τε ἐς τὴν Λακεδαίμονα πρεσβευομένους, μή τι ἄνευ τῶν πλειόνων κακὸν δράσωσι τὴν πόλιν. οὕπω ἀπαλλαξείειν ἠξίουν τοῦ ἄγαν ἐς ὀλίγους ἐλθεῖν, ἀλλὰ τοὺς πέντακισχιλίους ἔργῳ καὶ μὴ ὀνόματι χρῆναι ἀποδεικνύναι καὶ τὴν πολιτείαν ἰσαιτέραν καθιστάναι. ἦν δὲ τοῦτο μὲν σχῆμα πολιτικὸν τοῦ λόγου αὐτοῖς, κατ' ἰδίας δὲ φιλοτιμίας οἱ πολλοὶ αὐτῶν τῷ τοιούτῳ προσέκειντο, ἐν ᾧπερ καὶ μάλιστα ὀλιγαρχία ἐκ δημοκρατίας γενομένη ἀπόλλυται.

2. For Greek Prose :—

A prince without letters is a pilot (*κυβερνήτης*) without eyes. All his government is groping. In sovereignty it is a most happy thing not to be compelled ; but so it is the most miserable not to be counselled. And how can he be counselled that cannot see to read the best counsellors, which are books ? for they neither flatter us nor hide from us. He may hear, you will say ; but how shall he be always sure to hear truth ; or be counselled the best things, not the sweetest ? They say princes learn no art truly, but the art of horsemanship. The reason is, the brave beast is no flatterer. He will throw (*ἐκτραχηλίζω*) a prince as soon as his groom (*ὑπηρέτης*). Which is an argument that the good counsellors to princes are the best instruments of a good age. For though the prince himself be of a most prompt inclination to all virtue ; yet the best pilots have needs of mariners, besides sails, anchor, and other tackle (*σκεύη*). BEN JOHNSON.

MATHEMATICS.

Saturday, 6th October 1894.—2 *to* 5 *o'clock.*

1. Prove the characteristic property of the Nine-points-circle of a triangle.

The perpendiculars from the vertices of a triangle ABC on the opposite sides meet the circum-circle in A', B', C', respectively ; prove that the centres of the three escribed circles of the triangle $A'B'C'$ are the vertices of a triangle which is similar with ABC, and find the ratio of similarity.

2. Establish the characteristic property of the Radical Axis (Axis of Equipollence) of two circles.

If two circles touch, shew that any two circles orthogonal to both of them also touch.

3. Shew that the areas of any two similar polygons are in the duplicate ratio of the ratio of similarity (ratio of two homologous sides) of the two polygons.

Find an expression for the area of the regular n-gon inscribed in a circle of radius r in terms of n, r, and the area of the regular circumscribed n-gon. What does your formula mean when n is infinite?

4. Prove that the rectangle contained by the circum-radius of a triangle and one of its altitudes is equal to the rectangle contained by the sides about the corresponding vertex.

Find the locus of a point whose distances from two fixed points are in a given ratio.

5. If three concurrent straight lines through the vertices of a triangle ABC meet the opposite sides in D, E, F, respectively; prove that the product of the ratios in which D, E, F, divides those sides is -1 (with a certain convention regarding the signs of the ratios). State, without proof, the converse of this theorem.

By means of this theorem, or otherwise, deduce the harmonic properties of the "Complete Quadrilateral."

6. If a straight line be perpendicular to two non-parallel straight lines in a plane, it is perpendicular to every straight line in the plane.

Shew that, in general, one straight line and only one can be drawn parallel to a given straight line to intersect two given non-intersecting straight lines. What are the real or apparent exceptions?

7. The sum of the facial angles of any solid angle is less than four right angles.

How would you illustrate this theorem by means of a model?

Shew that the three planes each of which passes through an edge of a trihedral solid angle and bisects the opposite facial angle are coaxial.

8. Find an expression for the volume of a right circular cone, given the radius of its base and its height.

A buoy is formed by joining two equal right circular cones base to base. The axial section of the buoy is a square, and the distance between the two vertices is d: find an expression for the area of its surface.

9. Define the remainder of the quotient of two integral functions of x: and show that, if the dividend and divisor have a common factor, this factor also occurs in the remainder.

Factorise fully $9x^2+12x+1$ and $2x^2-5xy+2y^2+3y-2$.

10. Resolve $1/(x^4+x^2+1)$ into the sum of two proper fractions whose denominators are x^2+x+1 and x^2-x+1.

Express as a single fraction at its lowest terms

$$\frac{b+c}{(c-a)(a-b)(x-a)}+\frac{c+a}{(a-b)(b-c)(x-b)}+\frac{a+b}{(b-c)(c-a)(x-c)}$$

11. Find the condition that the three equations

$$Ax+By+C=0,\ A'x+B'y+C'=0,\ A''x+B''y+C''=0$$

may have a common solution; and state without proof the condition that they may have an infinite number of common solutions.

Solve the system

$$(x-a)(y-b)-a(y-b)-b(x-a)=0,\ x+y-a-b=0.$$

12. Shew that an integral equation of the n^{th} degree in one variable x cannot have more than n roots.

Solve

$$\sqrt{\{\tfrac{1}{2}(x^2-x+1)\}}+\sqrt{\{\tfrac{1}{2}(x^2+x+1)\}}=\sqrt{\{x^2+1+\sqrt{(7x^2-4x+2)}\}}.$$

13. Find the necessary and sufficient condition that $\sqrt{(a+\sqrt{b})}$ may be reducible to the form $\sqrt{p}+\sqrt{q}$, where a, b, p, q are commensurable numbers and $\sqrt{b}$ is incommensurable.

Express $\dfrac{\sqrt{3}-2\sqrt{2}+1}{\sqrt{3}-\sqrt{2}+1}-\dfrac{\sqrt{3}+2\sqrt{2}+1}{\sqrt{3}+\sqrt{2}+1}$

as a sum of simple surds.

Reduce $\{(3+2i)^{\frac{1}{2}}+1\}^{\frac{1}{2}}\{(3+2i)^{\frac{1}{2}}-1\}$ to the form $P+Qi$, where P and Q are real numbers and $i^2=-1$.

14. Shew how to sum the series $1+2+\ldots+n$; and deduce an expression for the sum of any arithmetic series.

Sum the series whose n^{th} term is $(1+r^n)(1-1/r^n)$.

15. Shew that four quantities in Arithmetic Progression cannot be proportional unless they are all equal.

The sum of four quantities in Arithmetic Progression is 4 and the sum of their squares is 16 : find them.

HIGHER GEOMETRY FOR WELSH MATHEMATICAL BURSARY AND KELLAND PRIZE.

Monday, 8th October 1894.—9 *to* 12 *o'clock.*

Candidates are requested to note on their papers the Bursary or Bursaries for which they are Candidates.

1. What is an Axiom; and, in particular, what is a Geometrical Axiom? Prove the following Theorem, and write down in a series all the Axioms you have explicitly or implicitly employed :—"If one side of a triangle be produced, the exterior angle is greater than either of the interior and opposite angles."

Shew, without the aid of the theory of parallels, that the sum of the angles of a triangle cannot exceed two right angles.

2. Through a point in the side of a triangle to draw a straight line bisecting the area of the triangle.

Through a point *not* in the side to draw a line bisecting the triangle.

Shew that all lines DE which can be drawn cutting off from a triangle ABC an area ADE equal to half the triangle ABC touch a hyperbola.

3. Prove the characteristic property of the Orthocentre of a triangle.

The Orthocentre, Centroid, and Circumcentre of a triangle are collinear.

4. If A_1A_2, B_1B_2 be two fixed infinite lines in a plane, and P move so that the sum of the areas PA_1A_2 and PB_1B_2 remains constant, shew that the locus of P is a straight line.

State, without proof, the most general theorem for the plane of which this is a particular case. State and prove the analogous theorem to the former for solid figures in space, and enunciate its generalised form.

5. Explain what is meant by the Angle between two intersecting curves.

Solve the following problems, and give the possible number of solutions in each case.

Describe a circle—

(i) To pass through two points and touch a given line.

(ii) To touch two lines and a circle.

(iii) To cut two given circles and a given line orthogonally.

6. Sketch generally the conception of Maxima and Minima as applied to Geometrical Magnitudes.

Given any number of circles in a plane, find the position of a point P such that that the sum of the squares of the tangents drawn from it to the circles shall be a minimum.

The tetrahedron of maximum volume which can be inscribed in a sphere is the regular tetrahedron.

7. Define clearly what is meant by the Position Ratio of a point on a line, and shew that if P and Q be harmonic conjugates with respect to A and B, then $CP.\ CQ = CA^2$, where C is the middle point of AB.

The Position Ratios of P, P', Q, Q', are $+\rho$, $-\rho$, $1/\rho$, $-1/\rho$ respectively; find the value of $\{PQP'Q'\}$ where P and Q are the base points.

A and B are fixed points on a line, and P a movable point on the line. Through P a line PQ is drawn perpendicular to AB, and equal to the magnitude of the position ratio of P with respect to A and B. Shew that the locus of Q is an equilateral hyperbola.

8. Given two fixed non-intersecting circles, the locus of a point P which moves such that the ratio of its powers with respect to the two circles is a constant $= \rho$ is a circle.

Trace roughly the positions of these circles as ρ assumes all different numerical magnitudes possible in the circumstances, and for any given value of ρ find the radius of the corresponding circle locus in terms of ρ, r_1 and r_2 the radii of the fixed circles, and d the distance between their centres.

9. Given two circles in non-parallel planes in space. Two sets of spheres are described, of which these circles are respectively sections. Prove that the radical planes of every two of the spheres, one from each set, all pass through a fixed point.

If, in addition, these pass through another fixed point, then there

exists an infinity of such points, and a sphere can be described to pass through both the given circles.

10. In every convex polyhedron the number of sides increased by two is equal to the number of faces plus the number of vertices.

A polyhedron has its faces consisting of n-gons, while at each vertex m faces meet. If F denote the number of faces, prove the relation $F=4m/\{2m+2n-mn\}$, and work out the various cases which arise when the faces are all equilateral triangles.

11. Prove the characteristic property of conjugate diameters for the ellipse.

If a Conic have two pairs of conjugate diameters at right angles, then the Conic is a circle.

The extremities of conjugate diameters of an ellipse are joined in order, and at the same time tangents are drawn through them. Shew that the two quadilaterals so obtained are parallelograms, of which the one is double the other.

12. Give the projective definition of points in Involution on a line, and deduce therefrom the corresponding metrical property.

If a quadrilateral be inscribed in a Conic and a line be drawn cutting the sides and the curve, the three pairs of points so obtained form an Involution.

GAELIC FOR MACPHERSON BURSERY.

Monday, 8th October 1894.—9 *to* 12 *o'clock.*

1. Translate into English :—

'S cha bhiodh lot'air an teangaidh
Taobh shios a' Mhill-teanail,
Le fion uillt na h-Anaid,
  Blas meala r'a òl air ;
Sruth brioghor, geal, tana,
'S e sloladh tro'n ghaineimh,
'S e 's milse na'n caineal,
Cha b'aineolach oirnn e :
Sud an iocshlainte mhaireann,
Thig á iochdar an talaimh,
Gheibhte lionmhorachd mhath dhi
Gun a ceannach le storas ;
Air àrainn na beinne
A's daicheile sealladh,
A dh'fhàs anns a' cheithreamh
A' bheil mi 'n Roinn-Eorpa :

2. Translate into English :—

"Mata," arsa Fionn, "tha Gille dhìth orm-sa agus ma chòrdas sinn mu'n duais tha mi coma ged chuireas mi muinntireas ort." "Cha b'e

sin mo chomhairle dhuit," arsa Conan. "Shaoil mi gu'n d'fhuair thu do leòir de na gillean fuadain sin cheana." "Cuist, a ghàrlaich!" ars' an Gille, "is minic a chuir do luathaire theanga do cheann ann an dragh, agus tha mise air mo mhealladh mur fairich thu cuid di air taille bruidhne 'n latha diugh." "Coma leat," arsa Fionn; "oir ni do choltas an gnothuch dhuit co dhiù. Gu de do dhuais gu ceann latha 's bliadhna?" "Gu'n téid thu féin agus a h-uile duine th'agad air chuireadh, air chuilm, agus air chuid oidhche còmhla riumsa 'nuair a bhitheas m'ùine' mach," ars' an Gille. An uair a chuala Fionn gu'n robh a chuid daoine ri dol leis, ghabh e misneach nach b'urrainn droch rud éirigh dhoibh, is iad còmhla; agus uime sin thubhairt e ris a' Ghille gu'm faigheadh e a dhuais.

3. Translate into Gaelic:—

They look upon fraud as a greater crime than theft, and therefore seldom fail to punish it with death; for they allege that care and vigilance, with a very common understanding, may preserve a man's goods from thieves, but honesty has no fence against superior cunning; and since it is necessary that there should be a perpetual intercourse of buying and selling, and dealing upon credit, where fraud is permitted and connived at, or has no law to punish it, the honest dealer is always undone, and the knave gets the advantage.

4. Write a brief account of the life and works of any one of the best-known modern Gaelic poets.

5. Translate into English:—

Cha mhinic a bha mi 'g éisdeachd
Ri séitrich na muice-mara,
Ach 's tric a chuala mi moran
De chrònanaich an daimh allaidh.
Cha do chuir mi duil 's an iasgach
Bhi 'ga iarraidh leis a' mhadhar;
'Smor gu'm b'annsa leam am findhach,
'S a bhi falbh nan sliabh 's an fhoghar.
'S aoibhinn an obair an t-sealg,
'S ait a cuairt an airde beachd;
Gur binne h-aighear 's a fonn
Na long is i dol fo beairt.

6. Parse *fully* every word in the last two lines of the above extract.

7. Write out, in the orthography and idiom of to-day, the following:—

Acht ata ni cheana, is mor an leathtrom agas an uireasbhuidh ata riamh orainde gaoidhil alban & eirand, tar an geuid eile don domhan, gan ar geanamhna gaoidheilge do chur ageló riamh mar ataid ageanamhna & adteangtha fein ageló ag gach vile chinel dhaoine oile sa domhan.

8. Why do we say in Gaelic *ri duine*, but *ris an duine?* Name the other prepositions which, in the modern language, are construed in this respect like *ri*, giving examples.

Examination Papers for Ordinary Degree of M.A. in 1894-95.

DEPARTMENT OF LANGUAGE AND LITERATURE.

LATIN.

Tuesday, 9th October 1894.—2.30 *to* 4.30 *o'clock.*

FIRST PAPER.

I. Translate into Latin :—

Since we cannot attain unto greatness, let us revenge ourselves by railing at it ; and yet it is not absolutely railing against anything to proclaim its defects, because they are in all things to be found, how beautiful or how much to be coveted soever. Greatness has in general this manifest advantage, that it can grow less when it pleases, and has very near the absolute choice of both the one and the other condition. For a man does not fall from all heights ; there are several from which one may descend without falling down. It does, indeed, appear to me that we value it at too high a rate, and also overvalue the resolution of those whom we have either seen or heard have contemned it, or displaced themselves of their own accord. Its advantages are not so manifest, that a man may not without a miracle refuse it : I find it a very hard thing to undergo misfortunes ; but to be content with a competent measure of fortune, and to avoid greatness, I think a very easy matter. 'Tis, methinks, a virtue to which I, who am none of the wisest, could, without any great endeavour, arrive.—MONTAIGNE.

II. Translate :—

Pari popularitate damnatos relegatosque restituit ; criminum, si quae residua ex priore tempore manebant, omnium gratiam fecit ; commentarios ad matris fratrumque suorum causas pertinentes, ne cui postmodum delatori aut testi maneret ullus metus, convectus in forum, et ante clare obtestatus deos neque legisse neque attigisse quicquam, concremavit ; libellum de salute sua oblatum non recepit, contendens nihil sibi admissum cur cuiquam invisus esset, negavitque se delatoribus aures habere. Titi Labieni, Cordi Cremuti, Cassi Severi scripta, senatus consultis abolita, requiri et esse in manibus lectitarique permisit, quando maxime sua interesset ut facta quaeque posteris tradantur. Rationes imperii, ab Augusto proponi solitas set a Tiberio intermissas, publicavit. Magistratibus liberam iuris dictionem et sine sui appellatione concessit.

Equites Romanos severe curioseque, nec sine moderatione, recognovit, palam adempto equo quibus aut probri aliquid aut ignominiae inesset, eorum qui minore culpa tenerentur nominibus modo in recitatione praeteritis. Ut levior labor judicantibus foret, ad quattuor priores quintam decuriam addidit. Temptavit et comitiorum more revocato suffragia populo reddere.

Wednesday, 10*th October* 1894.—9 *to* 11 *o'clock.*

SECOND PAPER.

I. (1) Translate:—

Ipsa autem, seu corticibus tibi suta cavatis,
Seu lento fuerint alvearia vimine texta,
Angustos habeant aditus; nam frigore mella
Cogit hiems, eademque calor liquefacta remittit.
Utraque vis apibus pariter timuenda; neque illae
Nequiquam in tectis certatim tenuia cera
Spiramenta linunt, fucoque et floribus oras
Explent, collectumque haec ipsa ad munera gluten
Et visco et Phrygiae servant pice lentius Idae.

(2) Translate, with short notes:—

(*a*) Continuo in silvis magna vi flexa domatur
In burim et curvi formam accipit ulmus aratri.
Huic ab stirpe pedes temo protentus in octo,
Binae aures, duplici aptantur dentalia dorso.

(*b*) Hic tibi praevalidas olim multoque fluentes
Sufficiet Baccho vites, hic fertilis uvae,
Hic laticis, qualem pateris libamus et auro.

II. Translate:—

(1) Graecia capta ferum victorem cepit et artes
Intulit agresti Latio: sic horridus ille
Defluxit numerus Saturnius, et grave virus
Munditiae pepulere; sed in longum tamen aevum
Manserunt hodieque manent vestigia ruris.
Serus enim Graecis admovit acumina chartis,
Et post Punica bella quietus quaerere coepit,
Quid Sophocles et Thespis et Aeschylus utile ferrent.
Tentavit quoque rem, si digne vertere posset,
Et placuit sibi, natura sublimis et acer;
Nam spirat tragicum satis et feliciter audet,
Sed turpem putat inscite metuitque lituram.

Explain the historical and literary allusions.

(2) Translate, with short notes :—

(*a*) Nil intra est oleam, nil extra est in nuce duri.
(*b*) Frater erat Romae consulti rhetor, ut alter
Alterius sermone meros audiret honores.
(*c*) Nunc Satyrum, nunc agrestem Cyclopa movetur.

III. (1) Translate :—

Enimvero apud Sarmatas non una vox ducis ; se quisque stimulant ne pugnam per sagittas sinerent : impetu et comminus praeveniendum. Variae hinc bellantum species, cum Parthus sequi vel fugere pari arte suetus distraheret turmas, spatium ictibus quaereret, Sarmatae omisso arcu, quo brevius valent, contis gladiisque ruerent : modo equestris proelii more frontis et tergi vices, aliquando ut conserta acies corporibus et pulsu armorum pellerent pellerentur. Iamque et Albani Hiberique prensare, detrudere, ancipitem pugnam hostibus facere, quos super eques et propioribus vulneribus pedites adflictabant.

(2) Translate, and explain fully :—

Hinc inopia rei nummariae, commoto simul omnium aere alieno, et quia tot damnatis bonisque eorum divenditis signatum argentum fisco vel aerario attinebatur.

How did this state of things arise?

IV. Translate, with *short* notes on the words italicised :—

(*a*) Est tibi sitque precor multos crescatque per annos
pulchra quidem, verum transtiberina domus :
at mihi *Vipsanas* spectant *cenacula laurus*,
factus in hac ego sum iam *regione* senex.

Migrandum est, ut mane domi te, Galle, salutem :
es tanti, vel si longius illa foret.
Sed tibi non multum est, unum si praesto togatum :
multum est hunc unum si mihi, Galle, nego.

(*b*) Hinc quoque deceptus Memphitica templa frequentat,
assidet et cathedris, *maesta iuvenca*, tuis.
Inde petit *centum pendentia tecta columnis*,
illinc *Pompeii dona nemusque duplex*.

(*c*) Cum tibi non essent sex milia, Caeciliane,
ingenti late vectus es *hexaphoro* ;
postquam *bis deciens* tribuit dea caeca sinumque
ruperunt nummi, factus es, ecce, pedes,
quid tibi pro meritis et tantis laudibus optem?
di reddant *sellam*, Caeciliane, tibi.

V. Explain the following phrases :—

(*a*) lunata nusquam pellis et nusquam toga.
(*b*) constemus tibi plumbea selibra.
(*c*) duxit et aestates synthesis una decem.

(*d*) ibis ab excusso missus in astra sago.
(*e*) amethystinatus media qui secat Septa.

VI. Translate, with short notes where necessary :—

(*a*) Et ait idem, ut aliquis metus adiunctus sit ad gratiam, certos esse in consilio, quibus ostendi tabellas velit: id esse perfacile; non enim singulos ferre sententias, sed universos constituere: ceratam uni cuique tabellam dari cera legitima, non illa infami ae nefaria.

(*b*) Te vero, Caecili, quemadmodum sit elusurus, quam omni ratione iactaturus, videre iam videor; quotiens ille tibi potestatem optionemque facturus sit, ut eligas utrum velis: factum esse necne, verum esse an falsum: utrum dixeris, id contra te futurum. . . . Quid? cum accusationis tuae membra dividere coeperit et in digitis suis singulas partes caussae constituere? Quid? cum unum quidque transigere, expedire, absolvere? Ipse profecto metuere incipies ne innocenti periculum facessieris.

(*c*) Ita defessa ac refrigerata accusatione rem integram ad M. Metellum praetorem esse venturam. Quem ego hominem si eius fidei diffisus essem iudicem non retinuissem. Nunc tamen hoc animo sum ut eo iudice quam praetore hanc rem transigi malim et iurato suam quam iniurato aliorum tabellas committere.

When did the trial of Verres begin? How, and for what purpose, did he hope to protract it? Explain the meaning of divinatio *as a legal term.*

VII. Answer *three* of the following questions :—

N.B.—*Either* (2) *or* (3) *must be among those selected.*

(1) Give some account of the *quaestio perpetua de repetundis*, and of the successive changes made in it from its institution to the trial of Verres, with special reference to the speeches against him.

(2) Mention the chief measures brought forward by C. Gracchus, and estimate shortly their effect upon subsequent Roman history.

(3) Give an outline sketch of Caesar's conquest of Gaul, marking any specially critical occasions or events.

(4) Describe shortly from Martial (with quotation or reference, where possible) the daily life at Rome in his time.

(5) Compare the Georgics with modern "poetry of nature."

(6) Criticise Tacitus as a military historian.

Tuesday, 2nd April 1895.—9 *to* 11 *o'clock.*

1. For Latin Prose :—

But where was the man to be found who had the courage, eloquence, and tact that were requisite to conduct so delicate a case? For, indeed, Sulla was not a man to be trifled with, and the task of attacking his favourite was one from which the boldest might well shrink. Those four and twenty lictors did not follow him wholly for show. When Q. Lucretius Ofella, who had deserted to his side, and had crowned

his victory by storming the younger Marius out of Praeneste, put up for the Consulship against his wishes, he had him beheaded in the Forum, and coolly informed the crowd who seized the executioner, that the man had acted by his orders. It is not therefore surprising if the noble friends of Sextus Roscius, while they thought that a stand ought to be made against the insolent tyranny of Chrysogonus, were not very eager to put themselves forward in the front rank. It would be safer if a more obscure man could be induced to undertake the defence.

2. Translate into English :—

Ut vero summo despexit ab aethere terras
Infelix Phaethon, penitus penitusque patentes,
Palluit, et subito genua intremuere timore,
Suntque oculis tenebrae per tantum lumen obortae.
Et iam mallet equos nunquam tetigisse paternos:
Jamque agnosse genus piget, et valuisse rogando.
Est locus, in geminos ubi bracchia concavat arcus
Scorpios, et cauda flexisque utrinque lacertis,
Porrigit in spatium signorum membra duorum.
Hunc puer ut nigri madidum sudore veneni
Vulnera curvata minitantem cuspide vidit,
Mentis inops, gelida formidine lora remisit.
Quae post quam summum tetigere iacentia tergum,
Et spatiantur equi, nulloque inhibente per auras
Ignotae regionis eunt, quaque impetus egit,
Hac sine lege ruunt, altoque sub aethere fixis
Incursant stellis, rapiuntque per avia currum.
Inferiusque suis fraternos currere Luna
Admiratur equos: ambustaque nubila fumant.
Corripitur flammis ut quaeque altissima tellus,
Fissaque agit rimas, et succis aret ademptis.

Tuesday, 2nd April 1895.—11.30 *to* 1.30 *o'clock.*

1. (*a*) Translate :—

Sponte sua quae se tollunt in luminis oras,
Infecunda quidem, sed laeta et fortia surgunt ;
Quippe solo natura subest. Tamen haec quoque, siquis
Inserat aut scrobibus mandet mutata subactis,
Exuerint silvestrem animum, cultuque frequenti
In quascumque voces artis haut tarda sequantur.
Nec non et sterilis quae stirpibus exit ab imis
Hoc faciat vacuos si sit digesta per agros :
Nunc altae frondes et rami matris opacant,
Crescentique adimunt fetus uruntque ferentem.
Iam, quae seminibus iactis se sustulit arbos,
Tarda venit, seris factura nepotibus umbram,
Pomaque degenerant sucos oblita priores,
Et turpis avibus praedam fert uva racemos.

(*b*) Translate, with short notes :—

(1) Ille ubi nascentem maculis variaverit ortum
Conditus in nubem, medioque refugerit orbe,
Suspecti tibi sint imbres.

(2) Non secus ac patriis acer Romanus in armis
Iniusto sub fasce viam quom carpit, et hosti
Ante expectatum positis stat in agmine castris.

(3) Non te nullius exercent numinis irae ;
Magna luis commissa ; tibi has miserabilis Orpheus
Hautquaquam ob meritum poenas, ni fata resistant,
Suscitat, et rapta graviter pro coniuge saevit.

2. (*a*) Translate :—

Si veteres ita miratur laudatque poetas
Ut nihil anteferat, nihil illis comparet, errat ;
Si quaedam nimis antique, si pleraque dure
Dicere credit eos, ignave multa fatetur,
Et sapit et mecum facit et Iove iudicat aequo.
Non equidem insector delendave carmina Livi
Esse reor, memini quae plagosum mihi parvo
Orbilium dictare ; sed emendata videri
Pulchraque et exactis minimum distantia miror.
Inter quae verbum emicuit si forte decorum,
Si versus paullo concinnior unus et alter,
Iniuste totum ducit venditque poema.

(*b*) Explain without translating :—

(1) Dicitur Afrani toga convenisse Menandro.
(2) Quattuor aut pluris aulaea premuntur in horas.
(3) Hic sponsum vocat, hic auditum scripta.
(4) Si proprium est quod quis libra mercatus et aerest.
(5) Scit Genius, natale comes qui temperat astrum.

3. (*a*) Translate, and explain allusions :—

Dum modo causidicum dum te modo rhetora fingis
Et non decernis, Laure, quid esse velis,
Peleos et Priami transit et Nestoris aetas
Et fuerat serum iam tibi desinere.
Incipe, tres uno perierunt rhetores anno,
Si quid habes animi, si quid in arte vales.
Si schola damnatur, fora litibus omnia fervent,
Ipse potest fieri Marsua causidicus.
Eia age, rumpe moras. quo te sperabimus usque ?
Dum quid sis dubitas, iam potes esse nihil.

(*b*) Explain without translating :—

(1) De nobis facile est, scelus est jugulare Falernum.
(2) Quod non optimus urbicus poeta.
(3) Nec te detineat miri radiata colossi
Quae Rhodium moles vincere gaudet opus.

(4) Quaeque Tyron totiens epotavere lacernae.
(5) Et quartum recitas et quintum denique broma.

4. Translate, with notes on the words in italics :—

Verum tamen L. Appuleium esse video *proximum subscriptorem*, hominem non aetate, sed usu forensi atque exercitatione tironem. Deinde, ut opinor, habet Alienum, *hunc tamen ab subselliis*, qui quid in dicendo posset numquam satis attendi, in clamando quidem video eum esse bene robustum atque exercitatum. In hoc spes tuae sunt omnes ; hic, si tu eris actor constitutus, totum iudicium sustinebit. At ne is quidem tantum contendet in dicendo quantum potest, sed consulet laudi et existimationi tuae, et ex eo, quod ipse potest in dicendo, aliquantum remittet, ut tu tamen aliquid esse videare.

(*b*) Res omnis mihi tecum erit, Hortensi ; dicam aperte : si te mecum dicendo ac diluendis criminibus in hac causa contendere putarem, ego quoque in accusando atque in explicandis criminibus operam consumerem ; nunc quoniam pugnare contra me instituisti, non tam ex tua natura quam ex istius tempore et causa [*malitiose*], necesse est istius modi rationi aliquo consilio obsistere. Tua ratio est ut secundum binos ludos mihi respondere incipias, mea ut ante primos ludos *comperendinem* ; ita fiet ut tua ista ratio existimetur astuta, meum hoc consilium necessarium.

5. Translate, with short notes where necessary :—

(*a*) Sensit vetus regnandi falsos in amore odio non fingere. Nec ultra moratus quam dum Scytharum auxilia conciret pergit properus et praeveniens inimicorum astus, amicorum paenitentiam ; neque exuerat paedorem, ut vulgum miseratione adverteret. Non fraus, non preces, nihil omissum, quo ambiguos inliceret, prompti firmarentur. Iamque multa manu propinqua Seleuciae adventabat, cum Tiridates simul fama atque ipso Artabano perculsus distrahi consiliis, iret contra an bellum cunctatione tractaret. Quibus proelium et festinati casus placebant, disiectos et longinquitate itineris fessos ne animo quidem satis ad obsequium coaluisse disserunt, proditores nuper hostesque eius quem rursum foveant.

(*b*) Ac tamen accusatores, si facultas incideret, poenis adficiebantur, ut Servilius Corneliusque perdito Scauro famosi, quia pecuniam a Vario Ligure omittendae delationis ceperant, in insulas interdicto igni atque aqua demoti sunt.

(*c*) Primo duodecim tabulis sanctum ne quis unciario faenore amplius exerceret, cum antea ex libidine locupletium agitaretur ; dein rogatione tribunicia ad semuncias redactum, postremo vetita versura.

6. Answer any *two* of the following :—

(1) What do you know about the following laws : —*Lex Sempronia Agraria, Lex Cornelia Judiciaria, Lex Manilia?*

(2) Sketch the life of Cicero from the time of his return from exile till the outbreak of the Civil War.

(3) Describe the powers and duties of a Roman propraetor or proconsul ; illustrate from the speeches *in Verrem*.

7. Answer *either* of the following :—

(1) What is Horace's position as a literary critic? Support your views by quotation.

(2) Describe, and illustrate from Martial, the way in which a Roman passed the day in the reign of Domitian.

GREEK.

FIRST PAPER.

Wednesday, 10*th October* 1894.—11.30 *to* 1.30 *o'clock.*

I. (1) Translate :—

κὰδ δ' ἄρ' Ὀδυσσῆϊ στόρεσαν ῥῆγός τε λίνον τε
νηὸς ἐπ' ἰκριόφιν γλαφυρῆς, ἵνα νήγρετον εὕδοι,
πρύμνης· ἂν δὲ καὶ αὐτὸς ἐβήσετο καὶ κατέλεκτο
σιγῇ· τοὶ δὲ καθῖζον ἐπὶ κληῖσιν ἕκαστοι
κόσμῳ, πεῖσμα δ' ἔλυσαν ἀπὸ τρητοῖο λίθοιο.
ἔνθ' οἱ ἀνακλινθέντες ἀνερρίπτουν ἅλα πηδῷ
καὶ τῷ νήδυμος ὕπνος ἐπὶ βλεφάροισιν ἔπιπτεν,
νήγρετος ἥδιστος, θανάτῳ ἄγχιστα ἐοικώς.
ἡ δ', ὥστ' ἐν πεδίῳ τετράοροι ἅρσενες ἵπποι,
πάντες ἁμ' ὁρμηθέντες ὑπὸ πληγῇσιν ἰμάσθλης,
ὑψόσ' ἀειρόμενοι ῥίμφα πρήσσουσι κέλευθον,
ὣς ἄρα τῆς πρύμνη μὲν ἀείρετο, κῦμα δ' ὄπισθεν
πορφύρεον μέγα θῦε πολυφλοίσβοιο θαλάσσης.
ἡ δὲ μάλ' ἀσφαλέως θέεν ἔμπεδον· οὐδέ κεν ἴρηξ
κίρκος ὁμαρτήσειεν, ἐλαφρότατος πετεηνῶν.

Write a note on the form *ἐβήσετο*, and on the Homeric usage of *πορφύρεος* and *θύω*.

(2) How are the following words used in *Odyssey*, xiii. :—*ἐπητανός*, *εὐδείελος*, *αὔτως*, *ἐπιμαίομαι*, *κακκείοντες*?

II. (1) Translate, with short notes on the underlined words :—

ὡς ἄνδρ' ἐλὼν μ' ἰσχυρὸν ἐκ βίας μ' ἄγει,
κοὐκ οἶδ' ἐναίρων νεκρὸν ἢ καπνοῦ σκιάν,
εἰδωλον ἄλλως· οὐ γὰρ ἂν σθένοντά γε
εἶλέν μ'· ἐπεὶ οὐδ' ἂν ὧδ' ἔχοντ', εἰ μὴ δόλῳ.
νῦν δ' ἠπάτημαι δύσμορος. τί χρή με δρᾶν ;
ἀλλ' ἀπόδος, ἀλλὰ νῦν ἔτ' ἐν σαυτῷ γενοῦ.
τί φῄς ; σιωπᾷς· οὐδέν εἰμ' ὁ δύσμορος.
ὦ σχῆμα πέτρας δίπυλον, αὖθις αὖ πάλιν
εἴσειμι πρὸς σὲ ψιλός, οὐκ ἔχων τροφήν·
ἀλλ' αὐανοῦμαι τῷδ' ἐν αὐλίῳ μόνος,
οὐ πτηνὸν ὄρνιν οὐδὲ θῆρ' ὀρειβάτην

τόξοις ἐναίρων τοισίδ', ἀλλ' αὐτὸς τάλας
θανὼν παρέξω δαῖθ' ὑφ'ὧν ἐφερβόμην,
καί μ' οὓς ἐθήρων πρόσθε θηράσουσι νῦν·
φόνον φόνου δὲ ῥύσιον τίσω τάλας
πρὸς τοῦ δοκοῦντος οὐδὲν εἰδέναι κακόν.

Scan the fourth line of this passage.

(2) Translate, with short notes on the syntax :—

ἔπειτα μέντοι χὠ λόγος καλὸς προσῆν,
εἰ τἀπὶ Τροίᾳ πέργαμ' αἱρήσοιμ' ἰών.

III. (1) Translate, explaining the underlined words : —

πρῶτόν τε ἦρξε καὶ ἐς τἄλλα τῇ πόλει ἐπὶ πλέον ἀνομίας τὸ νόσημα. ῥᾷον γὰρ ἐτόλμα τις ἃ πρότερον ἀπεκρύπτετο μὴ καθ' ἡδονὴν ποιεῖν, ἀγχίστροφον τὴν μεταβολὴν ὁρῶντες, τῶν τε εὐδαιμόνων καὶ αἰφνιδίως θνησκόντων καὶ τῶν οὐδὲν πρότερον κεκτημένων, εὐθὺς δὲ τἀκείνων ἐχόντων. ὥστε ταχείας τὰς ἐπαυρέσεις καὶ πρὸς τὸ τερπνὸν ἠξίουν ποιεῖσθαι, ἐφήμερα τά τε σώματα καὶ τὰ χρήματα ὁμοίως ἡγούμενοι. καὶ τὸ μὲν προσταλαιπωρεῖν τῷ δόξαντι καλῷ οὐδεὶς πρόθυμος ἦν, ἄδηλον νομίζων εἰ πρὶν ἐπ' αὐτὸ ἐλθεῖν διαφθαρήσεται. ὅ τι δὲ ἥδη τε ἡδὺ καὶ πανταχόθεν τὸ ἐς αὐτὸ κερδαλέον, τοῦτο καὶ καλὸν καὶ χρήσιμον κατέστη.

(2) Translate with short notes :—

(a) ἐν πολυτρόποις γὰρ ξυμφοραῖς ἐπίστανται τραφέντες· τὸ δ' εὐτυχές, οἵ ἂν τῆς εὐπρεπεστάτης λάχωσιν ὥσπερ οἵδε μὲν νῦν τελευτῆς ὑμεῖς δὲ λύπης, καὶ οἷς ἐνευδαιμονῆσαι ὁ βίος καὶ ἐντελευτῆσαι ξυνεμετρήθη.

(b) καὶ δοκοὺς μεγάλας ἀρτήσαντες ἀλύσεσι μακραῖς σιδηραῖς ἀπὸ τῆς τομῆς ἑκατέρωθεν ἀπὸ κεραιῶν δύο ἐπικεκλιμένων καὶ ὑπερτεινουσῶν ὑπὲρ τοῦ τείχους, ἀνελκύσαντες ἐγκαρσίας, ὁπότε προσπεσεῖσθαί πῃ μέλλοι ἡ μηχανή, ἀφίεσαν τὴν δοκὸν χαλαραῖς ταῖς ἁλύσεσι καὶ οὐ διὰ χειρὸς ἔχοντες· ἡ δὲ ῥύμῃ ἐμπίπτουσα ἀπεκαύλιζε τό προέχον τῆς ἐμβολῆς.

(3) Draw a plan to illustrate the blockade of Plataeae.

IV. (1) Translate, explaining the underlined words :—

οὔ τοι ἕνεκα ἠρόμην, ἦν δ' ἐγώ, οτι μοι ἔδοξας οὐ σφόδρα ἀγαπᾶν τὰ χρήματα. τοῦτο δὲ ποιοῦσιν ὡς τὸ πολὺ οἵ ἂν μὴ αὐτοὶ κτήσωνται· οἱ δὲ κτησάμενοι διπλῇ ἢ οἱ ἄλλοι ἀσπάζονται αὐτά. ὥσπερ γὰρ οἱ ποιηταὶ τὰ αὑτῶν ποιήματα καὶ οἱ πάτερες τοὺς παῖδας ἀγαπῶσι, ταύτῃ τε δὴ καὶ οἱ χρηματισάμενοι περὶ τὰ χρήματα σπουδάζουσιν ὡς ἔργον ἑαυτῶν, καὶ κατὰ τὴν χρείαν, ᾗπερ οἱ ἄλλοι. χαλεποὶ οὖν καὶ συγγενέσθαι εἰσίν, οὐδὲν ἐθέλοντες ἐπαινεῖν ἀλλ' ἢ τὸν πλοῦτον.

(2) *Ἆρ' οὖν τοῦτο ἂν θείης καὶ ἵππου καὶ ἄλλου ὁτουοῦν ἔργον, ὃ ἂν ἢ μόνῳ ἐκείνῳ ποιῇ τις ἢ ἄριστα ;*

Examine the argument from the *ἔργον*, by which Socrates shows that the just man is happier than the unjust.

(3) What is the exact meaning of *μὲν οὖν, δ' οὖν, ἆρ' οὐ, μῶν μή, ὡς ἔπος εἰπεῖν?*

V. (1) Answer any *two* of the following questions :—

1. Give a summary of the events between the Persian and Peloponnesian Wars.

2. Describe the state of affairs in Greece, and the balance of power, at the beginning and at the end of the Peloponnesian War.

3. Examine the policy of Pericles.

(2) Answer any *one* of the following questions :—

1. Compare the character of Odysseus in Homer and in the Greek dramatists, with special reference to the Philoctetes.

2. How far was the character of Greek Tragedy determined by its origin and the conditions of performance?

3. What do you know of the beginnings of (i) prose writing, (ii) literary criticism in Greece?

SECOND PAPER.

Wednesday, 10th October 1894.—2.30 *to* 4.30 *o'clock.*

μάλιστα δὲ καὶ πρὸ τῶν πάντων ἐλεύθερος ἔστω τὴν γνώμην καὶ μήτε φοβείσθω μηδένα μήτε ἐλπιζέτω μηδέν, ἐπεὶ ὅμοιος ἔσται τοῖς φαύλοις δικασταῖς πρὸς χάριν ἢ πρὸς ἀπέχθειαν ἐπὶ μισθῷ δικάζουσιν. ἀλλὰ μὴ μελέτω αὐτῷ μήτε Φίλιππος ἐκκεκομμένος τὸν ὀφθαλμὸν ὑπὸ Ἀστέρος τοῦ Ἀμφιπολίτου τοῦ τοξότου ἐν Ὀλύνθῳ, ἀλλὰ τοιοῦτος οἷος ἦν δειχθήσεται· μήτ' εἰ Ἀλέξανδρος ἀνιάσεται ἐπὶ τῇ Κλείτου σφαγῇ ὠμῶς ἐν τῷ συμποσίῳ γενομένῃ, εἰ σαφῶς ἀναγράφοιτο· οὐδὲ Κλέων αὐτὸν φοβήσει μέγα ἐν τῇ ἐκκλησίᾳ δυνάμενος καὶ κατέχων τὸ βῆμα, ὥστε μὴ εἰπεῖν ὅτι ὀλέθριος καὶ μανικὸς ἄνθρωπος οὗτος ἦν· οὐδὲ ἡ σύμπασα πόλις τῶν Ἀθηναίων, ἣν τὰ ἐν Σικελίᾳ κακὰ ἱστορῇ. ἡγήσεται γὰρ—ὅπερ δικαιότατον—ὑπ' οὐδενὸς τῶν νοῦν ἐχόντων αὐτὸς ἕξειν τὴν αἰτίαν, ἣν τὰ δυστυχῶς ἢ ἀνοήτως γεγενημένα ὡς ἐπράχθη διηγῆται· οὐ γὰρ ποιητὴς αὐτῶν, ἀλλὰ μηνυτὴς ἦν. ὥστε κἂν καταναυμαχῶνται τότε, οὐκ ἐκεῖνος ὁ καταδύων ἐστί. κἂν φεύγωσιν, οὐκ ἐκεῖνος ὁ διώκων, ἐπεὶ τοί γε εἰ σιωπήσας αὐτὰ ἢ πρὸς τοὐναντίον εἶπὼν ἐπανορθώσασθαι ἐδύνατο, ῥᾷστον ἦν ἐνὶ καλάμῳ λεπτῷ τὸν Θουκυδίδην ἀνατρέψαι μὲν τὸ ἐν ταῖς Ἐπιπολαῖς παρατείχισμα, καταδῦσαι δὲ τὴν Ἑρμοκράτους τριήρη καὶ τὸν κατάρατον Ὑλλίππον διαπεῖραι μεταξὺ ἀποτειχίζοντα. ἀλλ', οἶμαι, τὰ μὲν πραχθέντα οὐδὲ Κλωθὼ ἂν ἔτι ἀνακλώσειεν οὐδὲ Ἄτροπος μετατρέψειε.

LUCIAN, Πῶς δεῖ ἱστορίαν συγγράφειν, 38.

II. Translate into Greek :—

His design had always been to land in the Highlands of Scotland, before the winter season should be over, both for the safety of his embarkation, and that he might have time to draw those people together, who, he knew, would be willing to repair to him, before it should be known at Edinburgh that he was landed in the kingdom. He had, by frequent messages, kept a constant correspondence with those principal heads of the clans who were most powerful in the Highlands, and were of known or unsuspected affection to the king, and advertised them of

all his motions and designs. And by them acquainted those of the Lowlands of all his resolutions, who had promised, upon the first notice of his arrival, to resort with all their friends and followers to him.—CLARENDON.

Wednesday, 3rd April 1895.—9 *to* 11 *o'clock.*

I. (1) Translate, with short notes on the words underlined :—

κάρψω μὲν χρόα καλὸν ἐνὶ γναμπτοῖσι μέλεσσιν,
ξανθὰς δ' ἐκ κεφαλῆς ὀλέσω τρίχας, ἀμφὶ δὲ λαῖφος
ἕσσω ὅ κε στυγέῃσιν ἰδὼν ἄνθρωπος ἔχοντα,
κνυζώσω δέ τοι ὅσσε πάρος περικαλλέ' ἐόντε,
ὡς ἂν ἀεικέλιος πᾶσι μνηστῆρσι φανείης
σῇ τ' ἀλόχῳ καὶ παιδί, τὸν ἐν μεγάροισιν ἔλειπες.
αὐτὸς δὲ πρώτιστα συβώτην εἰσαφικέσθαι,
ὅς τοι ὑῶν ἐπίουρος, ὁμῶς δέ τοι ἤπια οἶδεν,
παῖδά τε σὸν φιλέει καὶ ἐχέφρονα Πηνελόπειαν.
δήεις τόν γε σύεσσι παρήμενον· αἱ δὲ νέμονται
πὰρ Κόρακος πέτρῃ ἐπί τε κρήνῃ Ἀρεθούσῃ,
ἔσθουσαι βάλανον μενοεικέα καὶ μέλαν ὕδωρ
πίνουσαι, τά θ' ὕεσσι τρέφει τεθαλυῖαν ἀλοιφήν.

(2) Translate, explaining the Homeric use of the cases :—

(*a*) ἀργαλέον καὶ ἕνα προικὸς χαρίσασθαι.
(*b*) ἀκταὶ ἀπορρῶγες, λιμένος ποτιπεπτηυῖαι.
(*c*) φθίσεσθαι κακὸν οἶτον ἐνὶ μεγάροισιν ἔμελλον.

(3) Scan the lines—

(*a*) ἀλλ' ἤ τοι σφέας κεῖθεν ἀπώσατο ἲς ἀνέμοιο.
(*b*) ἐν μὲν γὰρ οἱ σῖτος ἀθέσφατος, ἐν δέ τε οἶνος.

II. Translate, with short notes on the words underlined :—

(1) ὦ φέγγος ὕπνου διάδοχον, τό τ' ἐλπίδων
ἄπιστον οἰκούρημα τῶνδε τῶν ξένων.
οὐ γάρ ποτ', ὦ παῖ, τοῦτ' ἂν ἐξηύχησ' ἐγὼ
τλῆναί σ' ἐλεινῶς ὧδε τἀμὰ πήματα
μεῖναι παρόντα καὶ ξυνωφελοῦντά μοι.
οὕκουν Ἀτρεῖδαι τοῦτ' ἔτλησαν εὐφόρως
οὕτως ἐνεγκεῖν, ἀγαθοὶ στρατηλάται.
ἀλλ' εὐγενὴς γὰρ ἡ φύσις κἀξ εὐγενῶν,
ὦ τέκνον, ἡ σὴ, πάντα ταῦτ' ἐν εὐχερεῖ
ἔθου, βοῆς τε καὶ δυσοσμίας γέμων.
καὶ νῦν ἐπειδὴ τοῦδε τοῦ κακοῦ δοκεῖ
λήθη τις εἶναι κἀνάπαυλα δὴ, τέκνον,
σύ μ' αὐτὸς ἆρον, σύ με κατάστησον, τέκνον,

ἵν', ἡνίκ' ἂν κόπος μ' ἀπαλλάξῃ ποτὲ,
ὁρμώμεθ' ἐς ναῦν μηδ' ἐπίσχωμεν τὸ πλεῖν.
(2) καὶ δεῦρ', ἐάν μοι τοῦ χρόνου δοκῇτέ τι
κατασχολάζειν, αὖθις ἐκπέμψω πάλιν
τοῦτον τὸν αὐτὸν ἄνδρα, ναυκλήρου τρόποις
μορφὴν δολώσας, ὡς ἂν ἀγνοίᾳ προσῇ·
οὗ δῆτα, τέκνον, ποικίλως αὐδωμένου
δέχου τὰ συμφέροντα τῶν ἀεὶ λόγων.

III. (1) Translate, with short notes on the words underlined :—

τῆς τε πόλεως ὑμᾶς εἰκὸς τῷ τιμωμένῳ ἀπὸ τοῦ ἄρχειν, ᾧ ὑπὲρ ἅπαντας ἀγάλλεσθε, βοηθεῖν, καὶ μὴ φεύγειν τοὺς πόνους ἢ μηδὲ τὰς τιμὰς διώκειν, μηδὲ νομίσαι περὶ ἑνὸς μόνου, δουλείας ἀντ' ἐλευθερίας, ἀγωνίζεσθαι, ἀλλὰ καὶ ἀρχῆς στερήσεως καὶ κινδύνου ὧν ἐν τῇ ἀρχῇ ἀπήχθεσθε. ἧς οὐδ' ἐκστῆναι ἔτι ὑμῖν ἔστιν, εἴ τις καὶ τῶνδε ἐν τῷ παρόντι δεδιὼς ἀπραγμόσυνη ἀνδραγαθίζεται. ὡς τυραννίδα γὰρ ἤδη ἔχετε αὐτὴν, ἣν λαβεῖν μὲν ἄδικον δοκεῖ εἶναι, ἀφεῖναι δὲ ἐπικίνδυνον. τάχιστ' ἂν τε πόλιν οἱ τοιοῦτοι ἑτέρους τε πείσαντες ἀπολέσειαν, καὶ εἰ που ἐπὶ σφῶν αὐτῶν αὐτόνομοι οἰκήσειαν· οὐδ' ἐν ἀρχούσῃ πόλει συμφέρει ἀλλ' ἐν ὑπηκόῳ ἀσφαλῶς δουλεύειν.

(2) Translate and explain with reference to the context :—

(*a*) ξύλα μὲν οὖν τέμνοντες ἐκ τοῦ Κιθαιρῶνος παρῳκοδόμουν ἑκατέρωθεν, φορμηδὸν ἀντὶ τοίχων τιθέντες, ὅπως μὴ διαχέοιτο ἐπὶ πολὺ τὸ χῶμα.

(*b*) ταύτῃ δὲ ἀδύνατα ἐξισοῦσθαι οὐχ ὅτι τὰ ἐν τῇ Εὐρώπῃ. ἀλλ' οὐδ' ἐν τῇ Ἀσίᾳ ἔθνος ἓν πρὸς ἓν εἰκ ἔστιν ὅτι δυνατὸν Σκύθαις ὁμογνωμονοῦσι πᾶσιν ἀντιστῆναι· οὐ μὴν οἱ δ' ἐς τὴν ἄλλην εὐδουλίαν καὶ ξύνεσιν περὶ τῶν παρόντων ἐς τὸν βίον ἄλλοις ὁμοιοῦνται.

IV. Translate, with short notes on the words underlined :—

(1) λέγω γὰρ ὅνπερ νῦν δὴ ἔλεγον, τὸν μεγάλα δυνάμενον πλεονεκτεῖν, τοῦτον οὖν σκοπεῖ, εἴπερ βούλει κρίνειν, ὁσῳ μᾶλλον ξυμφέρει ἰδίᾳ αὐτῷ ἄδικον εἶναι ἢ δίκαιον. πάντων δὲ ῥᾷστα μαθήσει, ἐὰν ἐπὶ τὴν τελεωτάτην ἀδικίαν ἔλθῃς, ἣ τὸν μὲν ἀδικήσαντα εὐδαιμονέστατον ποιεῖ, τοὺς δὲ ἀδικηθέντας καὶ ἀδικῆσαι οὐκ ἂν ἐθελοντας ἀθλιωτάτους. ἔστι δὲ τοῦτο τυραννίς, ἣ οὐ κατὰ σμικρὸν τἀλλότρια καὶ λάθρᾳ καὶ βίᾳ ἁρπαιρεῖται, καὶ ἕρα καὶ ὅσια καὶ ἴδια καὶ δημόσια, ἀλλὰ ξυλλήβδην. ὧν ἐφ' ἑκάστῳ μέρει ὅταν τις ἀδικήσας μὴ λάθῃ, ζημιοῦταί τε καὶ ὀνείδη ἔχει τὰ μέγιστα.

Summarize the argument in a few words.

(2) εἰ ἄρα τὰ ὀφειλόμενα ἑκάστῳ ἀποδιδόναι φησί τις δίκαιον εἶναι, τοῦτο δὲ δὴ νοεῖ αὐτῷ, τοῖς μὲν ἐχθροῖς βλάβην ὀφείλεσθαι παρὰ τοῦ δικαίου ἀνδρός, τοῖς δὲ φίλοις ὠφέλειαν, οὐκ ἦν σόφος ὁ ταῦτα εἰπών.

How is this refutation arrived at by Socrates?

What part in the dialogue is assigned to Cephalus?

V. (1) Answer any *two* of the following questions, giving dates where you can :—

1. Sketch the growth of the confederacy of Delos, and its transformation into the Athenian Empire.

2. What was the policy of Pericles (*a*) toward the Allied Cities, (*b*) in home administration?

3. What do you know of—the second confederacy of Delos, the battle of Leuctra and its results, the Peace of Philocrates, the Peace of Demades?

(2) Answer *one* of the following questions :—

1. Illustrate the manner in which the Homeric poems influenced later Greek literature.

2. Explain the following terms in their relation to the history of the Greek drama :—*χορηγός, χοροδιδάσκαλος, ὀρχήστρα, λογεῖον, κλίμακες, στάσιμα, σκηνογραφία, ἀπὸ μηχανῆς, θεωρικόν, παράβασις.*

3. Give some account of the beginnings of prose writing in Greece, and of the influences which helped to form it.

Wednesday, 3rd April, 1895.—11.30 *to* 1.30 *o'clock.*

UNSEEN PASSAGE.

I. Translate :—

καλλίστην δέ ποτε καὶ ἀκριβεστάτην ἔδοξα σκευῶν τάξιν ἰδεῖν εἰσβὰς ἐπὶ θέαν εἰς τὸ μέγα πλοῖον τὸ Φοινικικόν. πλεῖστα γὰρ σκεύη ἐν σμικροτάτῳ ἀγγείῳ διακεχωρισμένα ἐθεασάμην. διὰ πολλῶν μὲν γὰρ δήπου ξυλίνων σκευῶν ὁρμίζεται ναῦς καὶ ἀνάγεται, διὰ πολλῶν δὲ τῶν κρεμαστῶν καλουμένων πλεῖ, πολλοῖς δὲ μηχανήμασιν ἀνθώπλισται πρὸς τὰ πολέμια πλοῖα, πάντα δὲ σκεύη ὥσοισπερ ἐν οἰκίᾳ χρῶνται ἄνθρωποι τῇ συσσιτίᾳ ἑκάστῃ κομίζει· γέμει δὲ παρὰ πάντα φορτίων ὅσα ναύκληρος κέρδους ἕνεκα ἄγεται. καὶ οὕτω κατακείμενα ἕκαστα κατενόησα ὡς οὔτε ἄλληλα ἐμποδίζει οὔτε ἀσυσκεύαστά ἐστι οὔτε δυσλύτως ἔχει, ὥστε διατριβὴν παρέχειν, ὅταν τῳ ταχὺ δέῃ χρῆσθαι. ἐγὼ οὖν κατιδὼν ταύτην τὴν ἀκρίβειαν τῆς κατασκευῆς ἔλεγον τῇ γυναικὶ ὅτι πάνυ ἂν ἡμῶν εἴη ἀσύνετον εἰ οἱ μὲν ἐν τοῖς πλοίοις καὶ μικροῖς οὖσι χώρας εὑρίσκουσι, καὶ σαλεύοντες ἰσχυρῶς ὅμως σῴζουσι τὴν τάξιν, καὶ ὑπερφορουμένοι ὅμως εὑρίσκουσι τὸ δέον λαμβάνειν, ἡμεῖς δὲ καὶ διῃρημένων ἑκάστοις θηκῶν ἐν τῇ οἰκίᾳ μεγάλων καὶ βεβηκυίας της οἰκίας ἐν δαπέδῳ, εἰ μὴ εὑρήσομεν καλὴν καὶ εὐεύρετον χώραν ἑκάστοις αὐτῶν, πῶς οὐκ ἂν πολλὴ ἡμῶν ἀσυνεσία εἴη ;

II. For Greek Prose :—

Not into such hands should the administration of justice be entrusted, but to those who know how to reward as well as to punish. It was a fine saying of Nangfu the emperor, who, being told that his enemies had raised an insurrection in one of the distant provinces : "Come then, my friends," said he, "follow me, and I promise you that we shall quickly destroy them." He marched forward, and the rebels submitted upon his approach. All now thought that he would take the most signal vengeance, but were surprised to see the captives treated with mildness

and humanity. "How!" cried his first minister, "is this the manner in which you fulfil your promise? Your royal word was given that your enemies should be destroyed, and behold you have pardoned all, and even caressed some!" "I promised," replied the emperor with a generous air, "to *destroy* my enemies; I have fulfilled my word, for see they are enemies no longer: I have made *friends* of them."

GOLDSMITH.

RHETORIC AND ENGLISH LITERATURE.

Tuesday, 9th October 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Write an Essay on *one* of these subjects:—

The yielding of Coriolanus.
The story of Tennyson's *Maud.*
The comic interest in *A Midsummer Night's Dream.*

N.B.—*An hour to be spent on the Essay.*

2. Give some account of the history *either* (1) of the English personal pronouns, *or* (2) of the changes that have occurred in the infinitive, the participles, and the plurals of English verbs.

3. Name the chief dialects of Early English, describing their respective areas; and specify the tests by which they may be most readily distinguished from each other.

4. Correct the following piece of bad English, pointing out the nature of each of the faults:—

Walking about five miles further, a bend on the road disclosed one of the most picturesque and yet most poverty-stricken villages which is to be seen in all England. Then Ralph, touching my arm, asked me to walk quicker in a disturbed tone, and returned to the topic of his former discourse. "I am sure," he said, "being a Socialist, that you will find in that village proof positive of what I have been trying to demonstrate, and that then we will be of one mind." Drawing near at last, a man staggered out of a cottage, in which we heard the crying of an infant, quite intoxicated; and, stumbling against Ralph, he uttered an execration. He seized hold of him; but, being the stronger of the two, he struggled free again. "Drink and money go hand in hand as the roots of all evil," Ralph gasped, as the man rolled off. "You may be a philosopher," I replied, laughing; but you are more than ordinarily equivocatory to-day."

5. No. 1 of the following is a piece of blank verse, printed as prose; the others are lines from English poems. Arrange No. 1 in its proper form of blank verse, without changing a word or the order of the words; and give the metrical formula and the prosodic name of each of the others:—

(1) "A little cloud no larger than an eagle in the sky to mar its blueness. Then a wind that blows the jagged cloud; and then, within

an hour, the whole sky overcast, and all the land a cold and shadowed place. Down drops the rain and soaks the grass, and crushes the frail flowers, and smirches them with earth. The heavy drops down patter on the trees ; the placid river is rippled with the rain."

(2) "Welcome her, welcome her, all that is ours."

(3) "Scarce of earth nor all divine."

(4) "From the height of the heaven that was rent with the roar of his coming in sunder."

(5) "The future a sunflecked shadow, alive and asleep with a blessing in store."

(6) "Let us hush this cry of 'Forward' till ten thousand years have gone."

(7) "Sprinkles the tops of the hills with drops of ambrosial moisture."

(8) "In vain the Tyrian maids their wounded Thammuz mourn."

Tuesday, 9th October 1894.—11.30 *to* 1.30 *o'clock.*

SECOND PAPER.

1. Name and describe, as nearly as possible in chronological order, *ten* important English Prose-works of the period between 1400 and 1580.

2. Sketch the life of *either* Gavin Douglas *or* Sir David Lindsay.

3. What is meant by the term *Elizabethanism* as descriptive of certain characteristics of the English Literature of the reigns of Elizabeth and James I. ? Illustrate by reference to Spenser, Bacon, and Shakespeare.

4. Shew, by reference both to matter and to form, the extent of your acquaintance with any *three* of the following :—*Paradise Regained*, *Absalom and Achitophel*, *Essay on Man*, *Hudibras*, *Gulliver's Travels*, *Tristram Shandy*, *Shortest Way with the Dissenters*, *Religio Medici*, *Religio Laici*, *Every Man in his Humour*, *Dr Faustus*.

5. Compare the versification of Milton's *Comus* with that of Tennyson's *Maud*.

6. On what grounds does Dr Johnson make the following estimate of Dryden? Discuss its justice with reference to the literary character of Johnson's own time :—"To him we owe the improvement, perhaps the completion, of our metre, the refinement of our language, and much of the correctness of our sentiments."

7. Sketch the history of *either* (*a*) the English Drama from the beginning of the reign of Charles I. to the end of that of Queen Anne, *or* (*b*) British Newspaper and Periodical Literature through the same period.

8. Why, and in what various respects, may the term *Pre-Drydenism* be used as summing up Wordsworth's doctrine in his Prose Essays and his influence on English Poetry? Include in your answer some reference to Book I. of *The Excursion*.

Monday, 1st April 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Write an essay on *one* of the following subjects :—

The Supernatural Element in *A Midsummer Night's Dream* compared with that in *Comus.*

De Quincey's Contention that the conditions of modern life are unfavourable to Rhetoric.

The character of Volumnia in *Coriolanus.*

(N.B.—*An hour to be spent on the Essay.*)

2. Either (*a*) give some account of the Celtic contribution to the English Vocabulary; or (*b*) state Morris's periods of the English language, noting structural differences characteristic of the first two.

3. State and explain the general distribution of Literature into kinds as adopted in the Course, giving examples of each kind from the English Literature of the Present Century.

4. Name in proper order the six qualities of Style discussed in the Course, explaining more particularly the third and the sixth.

5. Give the metrical formula and the prosodic name of each of the first seven of the following; and re-write No. 8 (which is a piece of blank verse printed as prose) in its proper verse form :—

(1) "And on the French they flew."
(2) "The browsing camels' bells were tinkling."
(3) "In the steerage a woman I saw."
(4) "Breadths of tropic shade and palms in cluster, knots of Paradise."
(5) "The wild deer and wolf to a cover can flee."
(6) "Angels adore him in slumber reclining."
(7) "Something of kindred, a common though latent vitality, greets us."
(8) "For all were once perfect and all must be at length restored. So God has greatly purposed; who would else in his dishonour'd works himself endure dishonour and be wronged without redress. Haste, then, and wheel away a shattered world, ye slow-revolving seasons."

Monday, 1st April 1895.—11.30 *to* 1.30 *o'clock.*

SECOND PAPER.

1. Give some account either (*a*) of the foreign influences affecting English Literature from the time of Chaucer to that of Dryden, or (*b*) of the history and changes of English verse-mechanism through the same period.

2. Either (*a*) give some account of Shakespeare's precursors in the Elizabethan Drama, or (*b*) sketch the history of the English Drama from Shakespeare's death to 1688.

3. Give the more important datings, or chronological divisions, for the lives of Spenser, Shakespeare, Milton, and Dryden.

4. Describe either (*a*) the special characteristics of Spenser's poetry and his influence on subsequent English and Scottish Writers, or (*b*) some of the special characteristics of the English Literature of the Restoration Period.

5. Either (*a*) summarise Johnson's criticism of Dryden, or (*b*) give the substance of De Quincey's appreciation of Jeremy Taylor and Burke respectively.

6. Name the more important poets of the eighteenth century specially mentioned by Wordsworth in his *Prefaces*, etc., and note the general tenor of his criticism of each.

7. Comment on the construction of Maud, and consider its frequent metrical changes as relative to its thought.

8. Annotate as many as you can of the following passages :—

(1) "Whilom she was the daughter of Locrine,
That had the sceptre from his father Brut."

(2) "I cannot
Put on the gown, stand naked, and entreat them
For my words' sake to give their suffrage."

(3) "Do not cry havoc, when you should but hunt
With modest warrant."

(4) "The moon of Rome, chaste as the icicle
That's curdied by the frost from purest snow,
And hangs on Dian's temple."

(5) "I could play Ercles rarely or a part to tear a cat in."

(6) "And heard a mermaid on a dolphin's back
Uttering such dulcet and harmonious breath,
That the rude sea grew civil at her song,
And certain stars shot madly from their spheres."

(7) "I was with Hercules and Cadmus once,
When in a wood of Crete they bay'd the bear
With hounds of Sparta."

(8) "She seems a sea-wasp flying on the waves."

(9) "Not that Nepenthes which the wife of Thone
In Egypt gave to Jove-born Helena."

(10) "Beds of hyacinths and roses,
Where young Adonis oft reposes,
Waxing well of his deep wound."

(11) "Under the drums and tramplings of three conquests."

(12) "In the literature of Rome it is that we find the true El Dorado of Rhetoric."

FRENCH.

Saturday, 6th April 1895.—11.30 *to* 1.30 *o'clock.*

FIRST PAPER.

I. Translate:—

Il y a des hommes océans en effet. Ces ondes, ce flux et ce reflux, ce va-et-vient terrible, ce bruit de tous les souffles, ces noirceurs et ces transparences, ces végétations propres aux gouffres, cette démagogie des nuées en plein ouragan, ces aigles dans l'écume, ces merveilleux levers d'astres répercutés dans on ne sait quel mystérieux tumulte par des milliions de cimes lumineuses, ces nuits de ténèbres coupées de rugissements, ces furies, ces flottes qui se heurtent ; puis ces grâces, ces douceurs, ces bateaux de pêche, ces chants dans le fracas, cette âpreté utile, cette amertume qui fait l'assainissement de l'univers, cet âpre sel sans lequel tout pourrirait ; ces colères et ces apaisements, cet inattendu dans l'immuable, ce vaste prodige de la monotonie inépuisablement variée, ce niveau après ce bouleversement—tout cela peut être dans un esprit et alors cet esprit s'appelle génie.

II. Translate:—

Qu'il est grand, là surtout ! quand, puissance brisée,
Des porte-clefs anglais misérable risée,
Au sacre du malheur il retrempe ses droits ;
Tient au bruit de ses pas deux mondes en haleine,
Et, mourant de l'exil, gêné dans Sainte-Hélène,
Manque d'air dans la cage où exposent les rois !
Qu'il est grand à cette heure, où prêt à voir Dieu même,
Son œil qui s'éteint roule une larme suprême !
Il évoque à sa mort sa vieille armée en deuil,
Se plaint à ses guerriers d'expirer solitaire,
Et, prenant pour linceul son manteau militaire,
Du lit de camp passe au cercueil !

Comment briefly on the peculiarities of Victor Hugo's style as exemplified by these two passages.

III. Translate into modern French (word for word) the following passages from old French :—

(*a*) Bons fut li siécles al tens ancienor
Quer feit i ert e justise et amor
Si ert credance, dont or n'i at nul prot ;
Toz est mudez, perdude at sa color :
Ja mais n'iert tels com fut als ancessors.

Al tens Noé et al tens Abraam
Et al David, cui Deus par amat tant
Bons fut li siécles ; ja mais n'iert si vaillanz ;
Viels est e frailes, tot, s'en vait declinant
Si'st empeiriez toz biens vait remanant.

(*b*) Oliviers sent que la mort molt l'angoisset,
Andoi li œil en la teste li tornent,
L'odide pert et la vedude tote.
Descent a piet, a la terre se colchet.
D'hores en altres si reclaimet sa colpe,
Contre le ciel ambesdous ses mains jointes,
Si priet Deu que paredis li doinset
Et benediet Charlon et France dolce,
Son compaignon Rollant desor toz homes.
Falt li li coers, li helmes li embronchet,
Trestoz li cors a la terre li jostet.
Morz est li cuens, que plus ne se demoret.
Rollanz li ber le ploret, sil doloset ;
Jamais en terre n'odrez plus dolent homme.

IV. (*a*) Give the Latin etymology, and a French doublet, of *métier*, *sevrer*, *hôtel*, *meuble*, *porche*, *frêle*, and state the laws which determine the formation of these words.

(*b*) Explain the formation of *être*, *étais*, *serai*, *encore*, *désormais*, *aujourd'hui*, *lendemain*.

V. (*a*) Give the English for : agrément, dérider, résumer, desservir, vicaire, tuteur, éditeur, actuellement, avertissement, procès, translation, propreté.

(*b*) Give the French for : agreement, deride, resume, deserve, vicar, tutor, editor, actually, advertisement, process, translation, property.

VI. (*a*) Answer any *two* of the following questions (answers may be written in French or in English, but additional marks will be allowed for good French style) :—

(1) Pourquoi l'art dramatique, l'art oratoire et l'art épistolaire ont-ils été les genres préférés de la littérature classique, et pourquoi la poésie lyrique a-t-elle échoué ?

(2) Que savez-vous de l'œuvre de Madame de Staël ?

(3) Dites ce que vous savez de la poésie d'Alfred de Musset.

(*b*) Answer any *one* of the following questions :—

(4) Pourquoi la France a-t-elle souffert à la fois des excès de la Réaction et de la Révolution ?

(5) Quels ont été pour la France les résultats de la conquête romaine dans le domaine littéraire et dans le domaine politique ?

(6) Comparez la Révolution française et la Révolution anglaise.

Saturday, 6th April 1895.—3 *to* 5 *o'clock.*

SECOND PAPER.

I. Translate :—

L'homme, dans la vie, m'a souvent fait penser à un pèlerin qui suit l'escalier en colimaçon d'une tour gothique. Après quelques circonvolutions le peu de jour qui venait de la porte s'est éteint. L'ombre des maisons qu'on n'a pas encore dépassées ne permet pas aux

soupiraux de laisser entrer le soleil : les murs sont noirs, suintants ; on a plutôt l'air de descendre dans un cachot d'où l'on ne doit jamais sortir, que de monter à cette tourelle qui, d'en bas, vous paraissait si svelte et si élancée. On hésite si l'on doit aller plus haut, tant ces moites ténèbres pèsent lourdement sur votre front. L'escalier tourne encore quelques fois et l'on commence à voir les pignons des maisons, les formes bizarres des cheminées ; quelques pas de plus, et l'œil plane sur la ville entière : c'est une forêt d'aiguilles, de flèches et de tours qui se hérissent de toutes parts. Quelques marches encore, et vous serez sur la plate-forme ; et alors vous verrez, au delà de l'enceinte de la ville, verdoyer les cultures, bleuir les collines et blanchir les voiles sur le ruban moiré du fleuve. Le son lointain de la cité vous arrive comme un murmure amical ou le bourdonnement d'une ruche d'abeilles : les vents vous apportent les senteurs de la forêt voisine et des fleurs de la montagne : ce n'est que lumière, harmonie et parfum. Si vos pieds s'étaient lassés, ou que le découragement vous eût pris et que vous fussiez resté assis sur une marche inférieure, ou que vous fussiez tout à fait redescendu, ce spectacle eût été perdu pour vous. Quelquefois cependant la tour n'a qu'une seule ouverture au milieu ou en haut : alors il faut un courage plus obstiné, pour parvenir au trèfle resplendissant par où la vue s'échappe sur la campagne. Ou bien les meurtrières (*loop-holes*) ont été remplies, ou l'on a oublié d'en percer, et alors il faut aller jusqu'au faîte ; mais plus on s'est élevé sans voir, plus l'horizon semble immense, plus le plaisir et la surprise sont grands.

THEOPHILE GAUTIER.

II. Translate into French :—

1. Nothing short of absolute perfection will satisfy him.
2. He was anything but pleased with the manner in which you spoke to him.
3. Don't trust to it, and don't meddle with it ; withdraw from it at once.
4. He will have to do without it as well as he can.
5. The wind, which was blowing very strong, blew off his hat.
6. He is wanting in all the great qualities which are required in a statesman.
7. He died in want at Genoa six years ago ; what more do you want to know about him ?
8. He does not intend to travel abroad, even though he should gain the prize.

III. Translate into French :—

As every climate has its peculiar diseases, so every walk of life has its peculiar temptations. The literary character, assuredly, has always had its share of faults—vanity, jealousy, morbid sensibility. To these faults were now superadded the faults which are commonly found in men whose livelihood is precarious, and whose principles are exposed to the trial of severe distress. All the vices of the gambler and of the beggar

were blended with those of the author. The prizes in the wretched lottery of book-making were scarcely less ruinous than the blanks. If good fortune came, it came in such a manner that it was almost certain to be abused. After months of starvation and despair, a full third night or a well-received dedication filled the pocket of the lean, ragged, unwashed poet with guineas. He hastened to enjoy those luxuries with the images of which his mind had been haunted. A week of taverns soon qualified him for another year of night-cellars.

MACAULAY.

GERMAN.

Monday, 8th April 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

I. Translate :—

Dieser sprach: „Ich tadle nicht gern, was immer dem Menschen
Für unschädliche Triebe die gute Mutter Natur gab;
Denn was Verstand und Vernunft nicht immer vermögen, vermag oft
Solch ein glücklicher Hang, der unwiderstehlich uns leitet.
Lockte die Neugier nicht den Menschen mit heftigen Reizen,
Sagt, erführ' er wohl je, wie schön sich die weltlichen Dinge
Gegen einander verhalten? Denn erst verlangt er das Neue,
Suchet das Nützliche dann mit unermüdetem Fleiße;
Endlich begehrt er das Gute, das ihn erhebet und wert macht.
In der Jugend ist ihm ein froher Gefährte der Leichtsinn,
Der die Gefahr ihm verbirgt, und heilsam geschwinde die Spuren
Tilget des schmerzlichen Übels, sobald es nur irgend vorbeizog.
Freilich ist er zu preisen, der Mann, dem in reiferen Jahren
Sich der gesetzte Verstand aus solchem Frohsinn entwickelt,
Der im Glück wie im Unglück sich eifrig und thätig bestrebet;
Denn das Gute bringt er hervor und ersetzet den Schaden."

II. Translate :—

Wir Schwestern saßen,
Die Wolle spinnend, in den langen Nächten,
Wenn bei dem Vater sich des Volkes Häupter
Versammelten, die Pergamente lasen
Der alten Kaiser und des Landes Wohl
Bedachten in vernünftigem Gespräch.
Aufmerkend hört' ich da manch kluges Wort,
Was der Verständ'ge denkt, der Gute wünscht,
Und still im Herzen hab' ich mir's bewahrt.

So höre denn und acht' auf meine Rede!
Denn, was dich preßte, sieh, das wußt' ich längst.
Dir grollt der Landvogt, möchte gern dir schaden,
Denn du bist ihm ein Hindernis, daß sich
Der Schwytzer nicht dem neuen Fürstenhaus
Will unterwerfen, sondern treu und fest
Beim Reich beharren, wie die würdigen
Altvordern es gehalten und gethan.

III. Paraphrase in German the following passage:—

Nicht ertrag' ich's
Indeß die edle Jugend rings umher
Sich Ehre sammelt unter Habsburg's Fahnen,
Auf meinem Erb hier müßig still zu liegen,
Und bei gemeinem Tagewerk den Lenz
Des Lebens zu verlieren.—Anderswo
Geschehen Thaten, eine Welt des Ruhms
Bewegt sich glänzend jenseits dieser Berge—
Mir rosten in der Halle Helm und Schild;
Der Kriegstrommete muthiges Getön,
Der Heroldsruf, der zum Turniere ladet,
Er dringt in diese Thäler nicht herein;
Nichts als den Kuhreihn und der Heerdeglocken
Einförmiges Geläut vernehm' ich hier.

IV. Translate, word for word, into modern German, the following passages from old German:—

(*a*) "Waz hât mich gerüeret?" daht der küene man
Dô sach er allenthalben: er vant dâ niemen stân.
Er sprach "ich pinz Sifrit, der liebe vriunt dîn,
Vor der küneginne solltu gar ân angest sîn.
Den scilt gip mir von hende und lâ mich den tragen,
Unde merke rehte waz du mich hœrest sagen.
Nu habe du die gebære: diu werc will ich begân."
Dô er in reht erkande, ez waz im liebe getân.

(*b*) Der bere von dem schalle durch die kuchen geriet;
Hey waz er kuchenknehte von dem fiwer schiet!
Vil kezzel wart gerüeret, zefüeret manic brant;
Hey waz man guoter spîse in der aschen ligen vant!
Dô sprungen von dem sedele die herren und ir man.
Der bere begonde zürnen: der künic hiez dô lân
Allez daz gehünde daz an seilen lac.
Und wær iz wol verendet, si heten vrœlîchen tac.

V. (A) Answer *any two* of the following questions (answers in (A) and

(B) may be written in German or in English, but additional marks will be allowed for good German style) :—

(*a*) What were Goethe's sources and models for the story, the characters, and the style of *Hermann und Dorothea*, and which are the Homeric features of the poem?

(*b*) What were the sources of Schiller's *Wilhelm Tell*, and which features of the composition, the plot, the characters, and the style of that drama shew the influence of Shakespeare?

(*c*) Which are the realistic and which the idealistic features in the story, the characters, and the style of *Hermann und Dorothea?*

(*d*) Trace the early development of Romanticism in Germany ; what were the literary principles of the Romantic School, and what were the ultimate results of the movement with regard to literature, art, history, and philology?

(B) Answer any *one* of the following questions :—

(*e*) Sketch the constitution and condition of Germany as described by Tacitus.

(*f*) What benefits resulted to Prussia from the reign of Frederick the Great?

(*g*) Mention the principal events in the War of Liberation.

Monday, 8th April 1895.—11.30 *to* 1.30 *o'clock.*

SECOND PAPER.

I. Translate :—

Wer immer in den gebahnten Wegen des Lebens fortgegangen ist, begrenzt durch das Gesetz, bestimmt durch Ordnung, Sitte und Form, welche in seiner Heimat als tausendjährige Gewohnheit von Geschlecht zu Geschlecht vererbt sind, und wer plötzlich als Einzelner unter Fremde geworfen wird, wo das Gesetz seine Rechte nur unvollkommen zu schützen vermag, und wo er durch eigene Kraft die Berechtigung zu leben sich alle Tage erkämpfen muß, der erst erkennt den Segen der heiligen Kreise, welche um jeden einzelnen Menschen Tausende der Mitlebenden bilden, die Familie, seine Arbeitsgenossen, sein Volksstamm, sein Staat. Ob er in der Fremde verliere oder gewinne, er wird ein Anderer. Ist er ein Schwächling, so wird er die eigene Art den fremden Gewalten opfern, in deren Bannkreis er getreten ist. Hat er Stoff zu einem Manne, jetzt wird er einer. Doppelt teuer werden seiner Seele die Güter, in deren Besitz er aufgewachsen war, vielleicht auch die Vorurteile, die an seinem Leben hingen ; und Manches, was er sonst gleichgültig angesehen hatte, wie Luft und Sonnenschein, das wird jetzt sein höchstes Gut. Erst im Auslande lernt man den Reiz des Heimatdialekts genießen, erst in der Fremde erkennt man, was das Vaterland ist.

FREYTAG.

II. Translate into German :—

(*a*) Would you have come if you had been allowed?

(*b*) I could not have come, even if I had wished.

(*c*) Everybody says that it must have been three years ago at least.

(*d*) I should not wonder if he were the author, but he ought to have given his name.

(*e*) I do think that he ought not to have been allowed to leave the house.

(*f*) On arriving at the station we were met by three gentlemen.

g These are the rules, by observing which you may avoid mistakes.

h Judging by his accent I should say he must have been a long time in this country.

III Translate into German :—

The affair was conducted with such secrecy that it did not reach the ears of the Spaniards. But their general was not one who allowed himself, sleeping or waking, to be surprised on his post. Fortunately the night appointed was illumined by the full beams of an autumnal moon, and one of the sentries perceived by its light, at a considerable distance, a large body of Indians moving towards the Christian lines. He was not slow in giving the alarm to the garrison. The Spaniards slept, as has been said, with their arms by their sides, while their horses stood ready saddled. In five minutes the whole camp was under arms, when they beheld the Indians cautiously advancing over the plain, their heads just peering above the tall corn with which the land was partially covered. Cortes determined not to abide the assault in his intrenchments but to sally out and pounce on the enemy when he had reached the bottom of the hill. PRESCOTT.

IV. Answer any *one* of the following philological questions :—

(*a*) Explain etymologically the formation of *any fifteen* of the following :—Armbruſt, bieder, Burſche, Gnade, Gemeinde, emſig, Faſtnacht, Frohnvogt, Geſelle, Geſindel, Herr, Herold, jetzt, meinetwegen, nur, ſonſt, Schulze, Verluſt, wacker, zwar.

(*b*) Explain the origin and illustrate the function of the suffixes :—tum, heit, ſchaft, lich, ſam, haft.

(*c*) Give three derivatives, each illustrating a vowel-change, from *any six* of the following (eighteen derivatives in all), viz. :—brechen, bergen, beben, (ge)bären, können, ſchweren, ſtechen, wiegen, ziehen.

(*d*) Illustrate the effect of the first and second consonantal shiftings on initial and medial dentals.

DEPARTMENT OF MENTAL PHILOSOPHY.

LOGIC AND PSYCHOLOGY.

Friday, 12*th October* 1894.—11.30 *to* 1.30 *o'clock.*

FIRST PAPER.

1. Explain the purpose and define the scope of Formal Logic. Give the Laws of Thought, and consider whether the Law of Universal Causation should be included among them.

2. Distinguish Contrary and Contradictory Opposition. What is the simplest proposition that must be established to disprove the following conclusions :—(1) All is not lost ; (2) Pain alone is evil ; (3) Either *A* is *B* or *C* is *D* ; (4) If *A* is *B*, *C* is *D*?

3. Explain in some detail how concepts are formed (1) when regarded logically, (2) when regarded psychologically. How does Locke compare the minds of men and animals?

4. Discuss the statement (1) that the syllogism is a *petitio principii*, and (2) that inductive arguments can be expressed syllogistically.

5. Give a concrete example of (1) a legitimate dilemma ; (2) an argument by analogy ; (3) contrapositive inference ; (4) the method of residues ; (5) a crucial instance ; (6) *ignoratio elenchi*.

6. What are the postulates of Inductive Logic? Can you deduce from them the canons of Agreement and Difference?

7. Give Hume's account of the origin of Belief in the uniformity of nature. Discuss the views of Locke, Berkeley, and Hume on the possibility of a science of nature.

Friday, 12*th October* 1894.—2.30 *to* 4.30 *o'clock.*

SECOND PAPER.

1. "The idea of space is at bottom one of time." Explain and criticise this statement.

2. What mental processes may be distinguished in an act of memory? How is a delusion of memory possible? How do you explain that one "law of association" is in operation at one time, another at another?

3. "Thinking is a procession of mental pictures, as we see very clearly in the thinking of children." Examine this statement, and explain on your own view the difference between the thinking of juveniles and adults.

4. "This way of speaking of *faculties* has misled many into a confused notion of so many distinct agents in us." Explain carefully what you mean by "mental faculty," and consider whether this quotation from Locke applies to your explanation.

5. Give, with several examples, Locke's classification of Complex Ideas. What origin does he assign to our complex ideas of (1) "particular substances," (2) "substance in general."

6. What are Berkeley's arguments for the existence of "finite spirits"? "That the *substance* which supports or perceives ideas should itself be an idea, or like an idea, is evidently absurd" (*Prin. of Hum. Knowledge*). How does this statement affect the arguments of Locke and Hume?

Monday, 1*st April* 1895.—3 *to* 5 *o'clock.*

FIRST PAPER.

1. Discuss the questions, (*a*) whether any abstract names are connotative ; (*b*) what is the relation between the intension and extension of terms.

2. In how many ways is it possible to prove syllogistically that "No judge is infallible," using "man" as a middle term? Name mood and figure, and shew that the different forms are reducible to one another.

3. Examine the following arguments :—

(*a*) Men reason correctly who have no knowledge of the rules of logic; the study of logic is therefore fruitless.

(*b*) Why advocate Socialism? Until men have become morally perfect, it is impossible; when they have become so, it will be unnecessary.

(*c*) The punishment of an offender by death is unjustifiable, for it obviously does not benefit the offender himself, and its advantage to society is very questionable.

4. "All Inference is from particulars to particulars." Explain and examine this theory of reasoning.

5. Define and exemplify the following :—

Analytic Judgment, Contraposition, Fallacy of Accident, False Analogy, Residual Phenomenon, Perfect Induction.

6. State the Joint Method of Agreement and Difference. What is its peculiar value in Inductive Inference? Discuss the principles which underlie it.

7. What are the relations (*a*) of philosophy to science, (*b*) of psychology to physiology.

Tuesday, 2nd April 1895.—3 *to* 5 *o'clock.*

SECOND PAPER.

(SIX *questions to be answered.*)

1. Analyse the mental processes called respectively "Attention" and "Distraction." How does Interest affect the variations of attention?

2. Analyse the perception of space which would be possessed by (*a*) a man born blind, (*b*) a man able to see, but without experience of touch or locomotion.

3. State and exemplify the two chief laws of Association. Investigate how far all Association is reducible to Redintegration.

4. Discuss carefully the nature of concepts with a view to determining the question at issue between Nominalism and Conceptualism.

5. State the process of argument by which, starting from the "*Cogito*," Descartes reaches certainty of the existence of God and of the material world.

6. What is the account of Substance given by Locke, Berkeley, and Hume respectively?

7. Trace the argument by which Hume proves that the idea of necessary connection is derived from a customary sequence.

MORAL PHILOSOPHY.

Saturday, 13th October 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Bring out the relations of thought, feeling, and impulse as concerned with "right" and "duty."

2. Discuss, in connection with the theory of the nature and function of conscience, (1) the statement that "the moral code advances with the progress of the race, and (2) the fact that one may boast of an act of which another would be ashamed.

3. Consider, in the case of moral judgments, how far a man's responsibility for his opinions and actions is affected by the current of his feelings.

4. Does the doctrine of Associationism in psychology imply a doctrine of Hedonism in ethics?

5. Classify our impulses to action; contrast their might and their right, and consider the means by which their might may be modified.

6. Discuss the argument for free-will based on personal conviction.

7. Divine Pantheism. Give an account of one such system and examine its ethical import.

Saturday, 13th October 1894.—11.30 *to* 1.30 *o'clock.*

SECOND PAPER.

1. What are the outstanding features of J. S. Mill's exposition of Utilitarianism? Examine his means for determining the comparative value of pleasures.

2. How did Butler establish "the *natural* supremacy of reflection or conscience"? How far does he meet the ethical doctrines of Hobbes?

3. Give a comparative account of the treatment of Benevolence in different ethical systems.

4. Give an outline of the ethical argument of Kant, as illustrated by his analysis of the notion "Duty."

5. Consider the historical position of Socrates as a moral philosopher (1) with respect to the Sophists, (2) with respect to Plato.

6. Give some account of the ethical doctrines of *three* of the following:—Locke, Shaftesbury, Adam Smith, Hume, Comte.

Thursday, 4th April 1895.—11.30 *to* 1.30 *o'clock.*

FIRST PAPER.

1. By what standard is the rightness of an action to be tested? In considering a moral action, how far is the original intention of the agent to be taken into account, or the consequences foreseen by him?

2. "The right is the pleasurable." Is this view consistent with the admission of obligation and responsibility? What does this admission imply with regard to the nature of morality?

3. How is "Desire" related to "Will"? Distinguish a "want" from a "motive." Is desire always for self-satisfaction?

4. How does Spencer's theory of Evolution account for the existence of moral law and the authority attributed to it?

5. What is the moral character of a wrong act done from a sense of duty?

6. "Self-reverence, self-knowledge, self-control." Discuss their nature and moral value.

7. Trace the psychological conditions under which formation of character is realised, and consider how far social influences may bear upon it.

Thursday, 4th April 1895.—3 *to* 5 *o'clock.*

SECOND PAPER.

1. "To aim at public and at private good are so far from being inconsistent, that they mutually promote one another." How does Butler shew this by reference to man's nature in respect to himself and to society?

2. State Butler's theory of Conscience. How is Conscience distinguished from Benevolence?

3. Summarise Mill's analysis of Justice. How does he prove its harmony with the Utilitarian stand-point?

4. Give Plato's and Aristotle's classifications of the cardinal virtues.

5. What views of Pleasure were held by the Stoics and by the Epicureans?

6. What were the chief points at issue between the "rationalist" and "moral sense" schools in English ethics. Exemplify in the case of Price and Hutcheson.

7. Give an account of Kant's views on Duty and Happiness.

POLITICAL ECONOMY.

Friday, 5th April 1895.—3 *to* 5 *o'clock.*

FIRST PAPER.

(*Answer* EIGHT *questions only.*)

1. How do you distinguish between the *Science* and the *Art* of Political Economy? How is the former related to Ethics?

2. Explain the terms Consumer's Rent, Total and Marginal Utility, and shew how the latter are connected with the Elasticity of Demand.

3. State and criticise Mill's fundamental propositions regarding Capital.

4. Explain the objects and mention the main regulations of the Bank Charter Acts of 1844 and 1845. Does the experience gained since then point to any modifications of these regulations?

5. Give the provisions of the Act of Navigation of 1651. State the grounds of Adam Smith's views regarding it.

6. What are, theoretically, the constituent elements of Profits? How is it that these elements are becoming more distinct practically? And how far is the wages element subject to the same laws as wages generally?

7. Discuss the effects of agricultural improvements upon rent.

8. Discuss the incidence of an export duty upon corn on the assumption of trade between two countries, one producing corn and the other manufactures.

9. State and discuss the objections urged, from the British point of view, against the adoption of international bimetallism.

10. What are the generally recognised exceptions to the principle of *laisser faire*?

Saturday, 6th April 1895.—9 *to* 11 *o'clock.*

SECOND PAPER.

(*Answer* EIGHT *questions only.*)

1. What is meant by Joint and Composite Demand? Under what conditions will a check on the supply of a thing that is wanted not for direct use, but as a factor of production, materially raise its price?

2. What are the chief causes which affect (1) the productiveness of labour, (2) the increase of Capital?

3. Explain carefully the law of supply and demand, and shew how it is fundamental in the determination of prices.

4. State and criticise the Wages Fund Theory.

5. State and discuss, shortly, the possible ways in which trade unions may raise wages (*a*) in particular employments, (*b*) in all employments.

6. How far is the value of money determined by its cost of production?

7. What are the principal causes of the fluctuations in the foreign exchanges? What modifications are introduced when the exchange is with a country with an inconvertible paper currency?

8. What does Adam Smith mean by "the obvious and simple system of natural liberty"? Illustrate your answer, shortly, by reference to his criticism of the Mercantile Theory.

9. State what is meant by Gresham's Law. Indicate its limits, and illustrate its operation in different forms of currency.

10. Examine critically the various interpretations of the maxim that taxation should be equal.

THEORY, HISTORY, AND ART OF EDUCATION.

M.A. Pass Examination and First Part of Diploma Examination.

Friday, 29th March 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Deduce from the analysis of an ethical act the Educative Process, and shew how thereby are marked out the range and functions of Education.
2. Justify the Analytico-Synthetic Method from a survey of the processes of reason.
3. Discuss Association as condition of all knowledge, and exhibit the practical bearings of its laws.
4. Specify the more important lessons to be inferred by the teacher from a knowledge of the physiological conditions of mind-activity.
5. Discuss the more important Materials of Education in the Sphere of the Real, both Naturalistic and Humanistic.
6. Consider the relations of the Intellectual to the Ethical in Education, and discuss the Method of the latter in its Real and Formal aspects respectively.
7. Give some account of the characteristics of a true Moral Authority, and its relative sanctions.
8. Apply the Rules of Method to—

(*a*) The Teaching of Arithmetic ;

or,

(*b*) Examining upon a Lesson ;

or,

(*c*) The Teaching of any Elementary Science.

M.A. Pass Examination and Second Part of Diploma Examination.

Friday, 29th March 1895.—11.30 *to* 1.30 *o'clock.*

SECOND PAPER.

1. In the *Conduct*, under the heads of Ideas and Principles, how does Locke shew that the fault of "defects and weakness in men's understanding" is due to themselves and not to nature?
2. A certain mode of dealing with books Locke designates as "improperly called study." Explain fully the grounds of his opinion and how he meets objections to what he recommends. What uses and abuses does he specify of Distinction and Division?
3. "Knowledge is an organic growth"—explain and illustrate in connection with the teaching of Latin. In connection with the same

subject, give examples of the principle of Method *Turn to Use*, and finish the quotation *cito scribendo non fit*, etc., explaining its import.

4. Defend the use of Language as an instrument of the discipline of intelligence. Briefly answer the questions, When, How Much, and How, in regard to it.

5. Sketch the School System proposed in the Great Didactic. What obstructions did Comenius find retarding the work of schools, and how does he propose to surmount them?

6. What does Comenius understand by the Arts? Give five canons which are to regulate the teacher's dealing with them.

7. Give an account of, and criticise, Locke's principles on the subject of Rewards and Punishments in relation to children. What mistakes on the subject does he specify?

SCHOOLMASTERS' DIPLOMA.

Saturday, 30th March 1895.—3 *to* 5 *o'clock.*

THIRD OR ADDITIONAL PAPER.

1. On what grounds does Quintilian plead for eminent teachers even for the youngest children? Give the sound principles of education enunciated in his treatment of this subject.

2. Give an outline of the discussion in the *Institutes* of the merits of public as contrasted with home education, and of class as opposed to individual teaching.

3. What is Quintilian's answer to those who, laying exclusive stress on natural ability, disparage the results of instruction and training.

4. Milton's Scheme of Secondary Education has been described as "realistic, encyclopædic, and technical." Explain and justify from the *Tractate*.

5. What were the chief demands made by the so-called *Innovators* in Education of the sixteenth century, and what principles of Method did they especially advocate?

6. What features of the system account for the high place occupied by the Schools of the Jesuits? Criticise the expedients they adopted for fostering emulation in their schools.

7. State the aim and characteristics of Hellenic education generally; *or*, shew briefly in what respects Locke's Conduct of the Understanding supplements the "Thoughts."

THESIS.

Post to Professor LAURIE, not later than Tuesday night, a paper on *either* of the following Theses:—

(*a*) School Discipline and its Method.

(*b*) The leading characteristics and defects of Comenius's Didactics.

DEPARTMENT OF SCIENCE.

PURE MATHEMATICS.

Thursday 11*th October* 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Prove that any two sides of a triangle are together greater than the third.

Shew that any quadrilateral frame-work jointed at the angles may in general be deformed to a trapezium in two ways, one of the trapezia being crossed: and that these positions give the maximum and minimum values of the sum of the squares of the diagonals.

2. Find the locus of the middle points of the chords of given length in a given circle.

Shew how to circumscribe about a given rectangle, a rectangle one of whose sides has a given length.

3. If the point D divide the base BC of a triangle internally, so that $mBD=nCD$, show that $mAB^2+nAC^2=(m+n)AD^2+mBD^2+nCD^2$.

Use this theorem to find an expression for the length of the internal bisector of an angle of a triangle in terms of its sides.

4. Prove that two triangles which have three angles of the one respectively equal to three angles of the other are similar.

A straight line parallel to the parallel sides of a trapezium is terminated by the other two sides and bisected by a diagonal: shew that the diagonal is divided in the ratio of the parallel sides.

5. Find expressions for the radii of the inscribed and escribed circles of a triangle in terms of the sides.

Find an expression for the area of the triangle whose vertices are the ex-centres in terms of the sides of the original triangle.

6. If A, B, C, D be four points in a plane, prove that the sum of any two of the rectangles $AB\,.\,CD$, $AC\,.\,BD$, $AD\,.\,BC$ is greater than the third, unless the four points are concyclic.

7. If a straight line meet the sides BC, CA, AB of a triangle in D, E, F respectively, shew that $AF\,.\,BD\,.\,CE/AE\,.\,BF\,.\,CD=1$.

If two straight lines $RACS$, PBQ meet two others PR, QS so that $PA=BQ$ and $RA=CS$, then BC cuts them in T and U so that $TB=CU$.

8. Shew that to every pair of non-intersecting straight lines in space there is a common perpendicular, which is the shortest distance between them.

Given two non-intersecting straight lines A and B and a straight line C intersecting them, discuss the problem to draw a straight line intersecting A and B and perpendicular to C.

9. Shew that the cross ratio of the four points in which any straight line meets four given concurrent straight lines is constant.

$ABCD$ and $EFGH$ are parallel straight lines, AE, BF, CG, DH are parallel and CH meets BE and AF in K and L respectively; show that DK and GL meet on AE.

10. Shew that the inverse of a circle is a circle.

Prove by inversion (or otherwise) that, A, B, C being fixed points, if two orthotomic circles are drawn through A, B and A, C respectively, the locus of their second intersection is a circle passing through B and C.

Or, as an alternative,

Find the equation to the radius of the circle $x^2+y^2-2gx-2fy+c=0$, which passes through a given point (h, k) on the circle.

Find the equation to the locus of the point from which the tangents to the two circles $x^2+y^2-c^2=0$, $(x-p)^2+(y-q)^2-r^2=0$ are equal, and interpret your result.

11. Shew that the subnormal in a parabola is constant.

A parabola touches the sides of an isosceles triangle at the extremities of its base; calculate its *latus rectum* in terms of the sides of the triangle.

12. Find the sine of the fifth part of a right angle.

AOB, COD are perpendicular diameters of a circle, E the middle point of AO. A circle with centre E and radius EC cuts OB in F. Shew that a chord of the circle of length CF subtends an angle $2\pi/5$ at the centre.

Thursday, 11th October 1894.—11.30 *to* 1.30 *o'clock.*

SECOND PAPER.

1. Apply the general principles of Algebraic Form (in particular the method of Indeterminate coefficients) to expand $(x+1)^3$ in powers of x.

Find the coefficient of x^{18} in

$$(x-1)^5(x^2-x+1)^5(x+1)^5(x^2+x+1)^5.$$

2. If A, P, Q be integral functions of x, and P be prime to Q, shew that the proper fraction A/PQ can always be expressed as the sum of two proper fractions whose denominators are P and Q.

Determine the constants A, B, C, so that

$A/(a+x)+B/(b+x)+C/(c+x)+ABC/(a+x)(b+x)(c+x)=0$ may be an identity as regards x.

Simplify

$$\frac{(s-a)^3+(s-b)^3+(s-c)^3-3(s-a)(s-b)(s-c)}{a^3+b^3+c^3-3abc},$$

where $2s=a+b+c$.

3. Given that the equations $x^3+91x^2+273x+27=0$ and $x^3+80x^2+240x+27=0$ have a common root, find it.

Factorise $4x^2+12x+13$ and $2a^4-9a^3b+14a^2b^2-9ab^3+2b^4$.

4. Establish the relations connecting the coefficients of an integral equation in one variable with its roots.

Solve the following equations

$$(\alpha)\quad x(x-2)(x-4)(x-6)+\frac{8064}{625}=0\,;$$

$$(\beta)\quad (a+b)^2x+(a-b)^2y=2a,\ ax+by=(a^2+b^2)/(a^2-b^2)\,;$$

$$(\gamma)\quad \begin{cases} x+y+z=0,\ xy+yz+zx+9=0, \\ (1+x^2)(1+y^2)(1+z^2)=100. \end{cases}$$

5. Prove that $(\cos\theta+i\sin\theta)^m=\cos m\theta+i\sin m\theta$, m being any positive integer.

Shew that the roots of the equation $x^5+x^4+x^3+x^2+x+1=0$ are given by the formula $x=\cos\frac{2m\pi}{6}+i\sin\frac{2m\pi}{6}$, where $m=1,\ 2,\ 3,\ 4,\ 5$.

6. Sum to n terms, first as an arithmetic series, second as a geometric series, the series whose first two terms are $1,\ a$.

Sum to n terms the two series whose n^{th} terms are $n(n+1)+x^n$ and $n(n+1)x^n$ respectively.

7. Draw the graphs of $y=\sin^2x/\cos x$ and $y=x/(x-1)^2$; and find the values of x corresponding to the maximum and minimum values of y in the second case.

8. Shew that the limit of $(1+1/x)^x$ when x is infinite is a finite quantity e.

Calculate the value of e to five places of decimals.

Or, as an alternative,

Shew that the equation to every straight line can be put into the form $x\cos\alpha+y\sin\alpha-p=0$, where α and p have certain geometrical meanings.

A straight line makes on the co-ordinate axes intercepts OA and OB such that $OA.OB=C^2$. Find the polar equation to the locus of the foot of the perpendicular from the origin on the straight line.

9. Prove the Binomial Theorem for positive integral exponents.

Find the greatest coefficient in the expansion of $(x+y)^{2n}$, and shew that the greatest coefficient in the expansion of $(x+y+z)^{3m}$ is that of $x^my^mz^m$, m being a positive integer.

Or, as an alternative,

Deduce from the focal definition the equation of a hyperbola referred to its principal axes.

Shew by means of your equation that, if R and S be points on a hyperbola and P a point an one of its asymptotes such that PRS lie in a straight line perpendicular to the major-axis, then $PR.PS$ is constant.

10. Prove the formula $\cos(A+B)=\cos A\cos B-\sin A\sin B$, and deduce the corresponding formula for $\sin(A-B)$.

Solve the equations

$$\tan^{-1}\{(x-1)/(x+1)\}+\frac{\pi}{4}=a;$$

$$\cos^3(x-a)=\cos^3 a\cos x+\sin^3 a\sin x;$$

And shew that

$$\sin A\cos(B-C)+\sin B\cos(C-A)+\sin C\cos(A-B)$$
$$=4\sin A\sin B\sin C \text{ where } A+B+C=\pi.$$

11. Find an expression for the radius of an escribed circle of a triangle in terms of the sides and angles in a form suitable for logarithmic computation.

If I be the centre of the inscribed circle of the triangle ABC, shew that $IA\,.\,IB\,.\,IC/abc=\triangle/s^2$.

12. Find the equation to the tangent at any point of the conic $ax^2+2hxy+by^2+2gx+2fy+c=0$.

Shew that the tangent to the conic $xy=d^2$ includes with the axes of co-ordinates a triangle of constant area.

Wednesday, 3rd April 1895.—3 *to* 5 *o'clock.*

1. Shew that two triangles are congruent when the sides of the one are respectively equal to the sides of the other.

AB and $A'B'$ are two lines of equal length in a plane: shew that, in general, AB can be brought to coincide with $A'B'$ by a rotation about the intersection of the perpendicular bisectors of AA' and BB'. Discuss the exceptions, apparent or real, which arise when AA' and BB' are parallel.

2. Shew how to construct an $(n-1)$-gon having the same area as a given n-gon: and deduce the quadrature of any plane rectilineal figure.

If P be the area of a regular pentagon, Δ the area of the triangle whose vertex and base are a vertex and the opposite side of the polygon, s a side and d a diagonal of the pentagon, then $P:\Delta=d^2+s^2:ds$.

3. A straight line being divided equally and also unequally, shew that the sum of the squares on the two unequal parts is equal to twice the sum of the squares on half the line, and on the part between the points of section.

A square equal to either of these quantities has its side 5/7 of the whole line: find the ratio in which the line is divided unequally.

4. Inscribe a circle in a given triangle.

If r_1, r_2, r_3 be the radii of the escribed circles of a triangle whose sides are a, b, c, shew that $(b-c)/r_1+(c-a)/r_2+(a-b)/r_3=0$.

5. Shew that the angle subtended at the centre of a circle is twice the angle subtended at the circumference by the same arc of the circumference.

Prove that the straight lines joining any point of the circumference of a circle to the ends of a fixed chord cut the diameter perpendicular to the chord in two points such that the rectangle under their distances from the centre is constant.

6. Define the power of a point with respect to a circle; and shew that the numerical value of the power is equal to the rectangle contained by the segments of any chord through the point.

A, B, C, D are fixed concyclic points. Two circles touch at P and always pass the one through A and B, the other through C and D: shew that the locus of P is a circle.

7. Prove that in two equiangular triangles the sides about the equal angles are proportional.

The sides of a triangle cut a fixed straight line in A, B, C. Shew that, if the vertices move along lines parallel to this line, the ratio $AB : BC$ is unaltered.

8. Prove that the perpendiculars from the vertices of a triangle on the opposite sides are concurrent.

In an isosceles triangle the perpendicular from the vertex on the base is bisected by the other perpendiculars; shew that the other perpendiculars are divided in the ratio of 3 : 1.

9. Prove that the cross-ratio of the four points in which any transversal meets a given pencil of four straight lines is constant.

If three of the rays of a pencil whose cross-ratio is given always pass through three fixed collinear points, shew that the fourth ray always passes through a fixed point.

Or, as an alternative—

Deduce from Boscovich's construction a construction for the pair of tangents from any point to a conic section.

If a point, O, move so that the points of contact of the tangents drawn from it to the conic subtend a constant angle, α, at the focus, shew that the locus of O is a conic having the same focus and directrix whose eccentricity is $e \sec \frac{1}{2}\alpha$.

10. Prove that in an ellipse the sum of the focal distances of any point on the curve is constant.

Given a focus and a diameter of an ellipse, find the ends of the axes.

11. Shew that the diagonals of a parallelopiped are concurrent.

A parallelopiped is given as to size and shape, and the sum of the squares of the distances of its vertices from a fixed point in space is constant: find the locus of its centre.

12. Define fully the functions $\tan x$ and $\sec x$; give a geometrical construction for finding their numerical values: and trace their graphs.

Trace the graph of $y = \tan 3x / \tan x$.

Given $2 \sin 3\theta = \cos 3\theta + 3 \cos\theta$, deduce an equivalent equation for $\tan\theta$. Solve this last equation; and write down formulae including all the admissible values of θ.

Thursday, 4th April 1895.—9 *to* 11 *o'clock.*

1. Shew that the sum of two rational algebraic proper fractions is always a proper fraction.

Express as a simple fraction in its simplest form

$$\frac{b-c+a}{x-a}+\frac{c-a+b}{x-b}+\frac{a-b+c}{x-c}+\frac{(b-c)(c-a)(a-b)}{(x-a)(x-b)(x-c)}.$$

Decompose $x^2/(x-1)^2(x-2)$ into partial fractions.

2. Shew that when a rational integral function $f(x)$ is divided by $x-a$, the remainder is $f(a)$.

Factorise completely x^3-2x-4.

Determine α and β so that $x^4+\alpha x^2y^2-4xy^3+\beta y^4$ may have the factor $(x-y)^2$; and shew that the function is then positive for all real values of x and y.

3. Establish the Multinomial Theorem for a positive integral exponent.

Find the co-efficients of x^5 in the expansions of $(1-x+x^3)^5$ and of $1/(2x^2-3x+1)$ in ascending powers of x.

4. Give a rationalising factor for $\sqrt{x}+\sqrt{y}+\sqrt{z}+\sqrt{u}$; and state the degree of the rational product.

Shew that the rational equation derived from $x+y^{\frac{1}{2}}+z^{\frac{1}{3}}=0$ is $(x^2-y)^3+2xz(x^3+3y)+z^2=0$.

5. Shew, by means of De Moivre's Theorem, how to construct the n n^{th} roots of any complex number; and represent the roots in Argand's Diagram.

If α be a given complex number and β a complex number whose modulus is given and is less than mod. α, prove that

$$\text{Amp. } \alpha-\sin^{-1}\{\text{mod.}(\beta/\alpha)\} \geqslant \text{Amp.}(\alpha+\beta) \geqslant \text{Amp. } \alpha+\sin^{-1}\{\text{mod.}(\beta/\alpha)\}.$$

Find the real value of $1/\sqrt{(1+i\tan\theta)}+1/\sqrt{(1-i\tan\theta)}$.

6. Find the conditions: (i.) that both roots of the quadratic $ax^2+bx+c=0$ be real; (ii.) that one root be infinite.

Shew that the equation

$$\sqrt{(x^2-3x+1)}+\sqrt{(x^2-x+1)}=p\sqrt{(x^2+1)}$$

can alway be solved by means of quadratics; and work out the solution when $p=2$.

Solve the system

$$\frac{x-1/y^2}{x-1/y}=\frac{y-1/x^2}{y-1/x},\quad \frac{1}{x}+\frac{1}{y}=1.$$

7. Trace the graph of $y=(x^2-1)/(x^2+1)$. What are the turning values of y?

If x and y are rational functions of one another, and they become infinite together, and each is zero when the other is unity, find the relation between them.

8. Find the sum of n terms of an arithmetical progression.

Express n^2 in the form $f(n+1)-f(n)$, where $f(n)$ is an integral

function of n of the third degree; and, by means of your result, sum the series $1^2+2^2+\ldots+n^2$.

Also sum the series $1^2-2^2+3^2-\ldots-(2n)^2$.

9. Assuming the inequality $\tan x > x > \sin x$, where $0 < x < \frac{1}{2}\pi$, shew that $x > \sin x > x - \frac{1}{3}x^3$; and $1 > \cos x > 1 - \frac{1}{2}x^2$.

Shew, by means of these results, that $\int_{x=0} (\tan x - x)/x^3$ is finite.

Evaluate $\int_{x=\infty} \{x/(x+3)\}^x$.

Or, as an alternative,

Shew that the equation to a hyperbola referred to its axis is $x^2/a^2 - y^2/b^2 - 1 = 0$.

From a variable point M on the major axis a straight line is drawn so as to meet a hyperbola in one finite point P and in one point at infinity; shew that the locus of the middle point of MP is a hyperbola.

10. In any triangle shew that $a/\sin A = b/\sin B = c/\sin C$; and eliminate A and B from these equations.

Find the sides and angles of the triangle whose vertices are the feet of the perpendiculars of a given triangle.

Hence, or otherwise, prove that in any triangle $4\phi(\phi - \sin 2A)(\phi - \sin 2B)(\phi - \sin 2C) = (\sin 2A \sin 2B \sin 2C)^2$, where $2\phi = \sin 2A + \sin 2B + \sin 2C$.

Or, as an alternative,

Prove, either synthetically or analytically, that the locus of the middle points of a series of parallel chords of a conic is a straight line.

The ordinates of the points where a tangent to the ellipse $x^2/a^2 + y^2/b^2 - 1 = 0$, and the parallel diameter meet the directrix are y_1 and y_2; shew that $(y_1 - y_2) = b^2 + c^2 y_2^2$.

11. Shew that the equation

$$l(Ax + By + C) + m(A'x + B'y + C') = 0,$$

where l and m are arbitrary constants, represents a straight line passing through the intersection of

$$Ax + By + C = 0, \quad A'x + B'y + C' = 0.$$

The co-ordinates of A, P, B, Q are $(a, 0)$, $(p, 0)$, $(0, b)$, $(0, q)$ respectively; shew that the locus of the intersection of AQ and BP will be a fixed straight line provided

$$(Aa + Bb + C)pq = (Ap + Bq + C)ab,$$

where A, B, C are constants.

12. Calculate expressions for the diagonals of a cyclic quadrilateral in terms of the sides.

From a ship, which is sailing due north, two lights are seen in line bearing α E. of N. An hour and a-half later one of them bears due E., the other β E. of N. The speed of the ship is 12 miles an hour, $\tan \alpha = 3/4$, and $\tan \beta = 5/6$; find the distance between the lights.

Or, as an alternative,

The length of the perpendicular from the origin on a straight line is p, and the inclination of the perpendicular to the x-axis α; shew that the length of the perpendicular from (x, y) on the line is (with a certain understanding as to sign) $x \cos \alpha + y \sin \alpha - p$.

A and B are two fixed points, and O the middle point of AB. If P move so that the sum of the squares of the perpendiculars from O on AP and BP is constant, shew that the locus of P is a curve of the fourth degree.

NATURAL PHILOSOPHY.

Thursday, 11th October 1894.—2.30 *to* 4.30 *o'clock.*

FIRST PAPER.

(EIGHT *Questions, at most, to be answered.*)

1. Given the velocities of two points, shew how to find the velocity of one with respect to the other.

Two pendulums of equal length swing through equal arcs, passing the lowest points at the same time in opposite directions. Shew that the relative motion of the bobs is in a straight line.

Does absolute velocity exist? Give a reason for your answer.

2. Shew that the path of a projectile under the action of gravity only is a parabola, whose axis is vertical.

A projectile is fired with given speed at a vertical wall from a given distance. Find, geometrically or otherwise, the highest point that can be hit, and the elevation required to hit it.

3. A heavy uniform rod rests on a smooth inclined plane and against a smooth peg. Shew that there are two positions of equilibrium if the distance of the peg from the plane is less than half the length of the rod, and the horizontal distance is greater than half the length but less than the whole.

4. If the Moon's density is $\frac{3}{5}$ of the Earth's, and its radius $\frac{1}{4}$ of the Earth's, compare the weights for a given man on their surfaces.

5. A circular table stands on three equidistant legs on its rim. Shew that a mass equal to the mass of the table placed on it anywhere will not upset it, but if it is placed on the edge midway between two legs the equilibrium is unstable.

6. Define the terms perfect fluid, perfect liquid, fluid pressure. Shew that in a perfect fluid at rest or in motion the pressure at any point is the same in all directions.

7. A hemispherical bowl, radius 2 feet, is divided by a partition through its vertical radius and one half filled with water weighing 62·5 lbs. per cubic foot. Find the whole pressure on the partition.

8. State Kepler's Laws and Newton's deductions from each. Are Kepler's Laws strictly accurate? If not, how do you account for their divergence from accuracy?

9. Define the Hodograph of the path of a point or particle. Shew that when the acceleration is central, and inversely as the square of the distance, the Hodograph is a circle.

10. Find the limiting positions of equilibrium of a slab resting on a rough inclined plane, and attached by an elastic string to a point in the plane, the inclination of the plane being less than the critical angle.

11. Define the Metacentre in a floating body of a cylindrical form, and shew how the stability can be calculated from it.

12. State fully, and illustrate by an elementary example, how far the first two of Newton's laws carry us, and wherein lies the necessity for a third.

Friday, 12th October 1894.—9 *to* 11 *o'clock.*

SECOND PAPER.

(*Eight Questions, at most, to be answered.*)

1. In what sense are we entitled to look upon the "Conservation of Energy" as rigorously true? Apply a similar test to the "Principle of Least Action."

2. It is commonly said that a gas has two specific heats. Define these accurately, and shew that the one is necessarily greater than the other for the same gas.

3. Distinguish carefully between Heat and Temperature, and shew how the conception of an absolute scale of temperature may be derived from the properties of Carnot's ideal perfect engine. How is the Absolute Zero necessarily introduced?

4. Define the Viscosity of a liquid, and shew how its amount can be measured by passage through a capillary tube. In the fall of small spherules of water in a cloud, how does the terminal speed depend on the radius, and why?

5. Explain the formation of the Rainbow, and describe, in particular, the difference in the modes of formation of the First and the Second Rainbows. Whereabouts is the Third Rainbow? What are the supernumerary bows, and how are they produced?

6. What is understood by Dispersion of light? Distinguish it from Refraction, and explain the action of an achromatic combination of lenses, or the construction of the usual direct vision spectroscope.

7. Describe, in detail, what is involved in any one of the following phrases :—

(*a*) The Critical Temperature of a Substance.
(*b*) The Angle of Total Reflection of Light.
(*c*) The Neutral Point of a Thermoelectric Couple.

8. Give a general explanation of the propagation of a state of compression in a gas, and shew that the speed depends *only* upon density and compressibility. Distinguish between isothermal and adiabatic

compressibility ; and shew why the latter must be employed in calculating the speed of sound.

9. Trace the successive transformations of Energy, which occur when the current from a voltaic battery is used to ring an electric bell, or to heat a wire to incandescence.

10. Define the capacity and potential of a condenser, and express in terms of them the energy of the charge. A charged condenser is brought into connection with an insulated uncharged condenser of the same capacity. How much electrical energy is lost to the system, and in what form does this energy appear?

11. What is the "Harvest Moon"? Explain the nature of the phenomenon, and point out why it occurs at one particular season.

12. Explain, generally, the cause of the deflection of a rotating spherical projectile ; pointing out why a smooth bore gun-barrel must be bent to the left in order to shoot round a corner to the right.

For Neil-Arnott Prize.

(*The following Questions to be answered in addition to* FOUR, *at most, of the preceding.*)

I. Describe the phenomenon known as Dialysis.

II. When two notes, sufficiently differing in pitch, are sounded together, we generally hear a third note whose vibration number is the difference of the vibration numbers of the two notes. How is the presence of this Difference Tone explained?

III. Give the general laws of steady flow of liquids in pipes, and shew their analogies to the electrical phenomena summed up in Ohm's Law.

IV. If two india-rubber shells be connected, and the whole system filled with compressed air, shew how the tensions of the shells depend on their radii. Contrast and compare this with the distribution of electric charge on two spheres connected by a wire.

V. Account, generally, for the peculiar behaviour of an electric conductor when an alternating current of short period is substituted for a steady one.

Friday, 5th April 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

1. Find an expression for the Acceleration of a point moving uniformly in a circle.

Compare the accelerations of two points, the lengths of their circular paths being as 2 to 1, and their periods of revolution as 3 to 2.

2. State Kepler's Laws.

Define the stationary position of a planet, and, taking all planetary orbits as circles, find the distance of a planet from the earth when it is stationary in terms of their distances from the sun.

3. Explain why solar days differ in length. How would you define accurately an hour?

4. What is the unit of force, and how is it related to the weight of unit mass?

5. Enunciate Newton's Third Law of Motion, and illustrate its meaning by reference to some simple phenomenon.

Two bodies, whose masses are as 2 to 1, are moving in the same line with different velocities. After impact the bodies move on together as one with a speed 10. When the initial velocities are interchanged, the common speed of the two bodies after impact is 2. Find the initial velocities.

6. Distinguish between the quantities Momentum and Kinetic Energy. In the case of a constant force acting on a given mass, shew that the work done by the force is equal to the kinetic energy gained.

7. Explain the meaning of the phrase "Water seeks its level," and discuss in detail the action of the siphon.

With what speed will the water issue from an orifice in the bottom of a tank which is filled to a depth of 6 feet?

8. Define Viscosity, and mention some of its chief ordinary results in air and in water.

9. If a chain, half of whose length rests on a rough floor, just begins to move when the other end points at an inclination of 60° with the floor, find the coefficient of friction.

10. What is Hooke's Law?

An elastic string is 20 and 24 inches long when stretched by the weights of 2 and 3 pounds respectively. Calculate the unstretched length of the string.

11. Calculate roughly, in pounds weight, the attraction between two spheres of water a mile in radius, their centres being 100 miles apart.

12. Describe a form of experiment which proves that water possesses great tenacity.

Friday, 5th April 1895.—11.30 *to* 1.30 *o'clock.*

SECOND PAPER.

1. State the Laws of Boyle and Charles.

A bubble of gas 1 mm. in radius is formed in water at a depth of 100 metres. Find its radius at the surface if the temperature of water decreases 3°C. for a kilometre increase in depth, when the thermometer stands at 15°C., and the barometer at 76 cm.

[Density of mercury = 13·6.]

2. Define the specific heats of a gas at constant pressure, and at constant volume, and shew that the former is always the greater. Why is this distinction unnecessary for liquids?

3. State Carnot's laws of Thermodynamics, and shew how an absolute scale of temperature may be deduced.

4. Describe and explain the observed effects, when the source of a musical sound moves relatively to the listener. Why cannot similar effects be produced by wind?

5. State the laws of reflection and refraction of light.

A luminous source is at a given depth in water. Describe the behaviour of the various rays of light, as they meet the surface, explaining which are partially refracted and which totally reflected.

6. Describe the simple astronomical telescope, and determine its magnifying power.

7. Give reasons for believing that light motion is wave motion. Describe the phenomenon known as Newton's Rings.

8. State, and shew how to account for, the elementary facts of double refraction.

9. Define the capacity of a conductor, and explain the action of the Leyden Jar.

10. State Ohm's Law.

A number of similar Voltaic cells are arranged in multiple arc to send a current through a wire *W*, of the same resistance as each cell. If another cell is added, is the greatest current produced by putting it (1) in multiple arc with the others, (2) in series with one of them, or (3) in the wire *W*?

11. Describe two modes of measuring the intensity of an electric current.

12. Contrast, and compare, the concepts *Matter* and *Energy*; and shew that they comprise all that is in the physical universe.

CHEMISTRY.

See under First Professional Examination for Degrees in Medicine.

ZOOLOGY.

See under First Professional Examination for Degrees in Medicine.

BOTANY.

Monday, 23rd July 1894.—1 *to* 3 *o'clock.*

1. Write an account of the life history of Claviceps purpurea or of Marchantia polymorpha.

2. Give an account of the origin and distribution of starch in plants.

3. What is the significance to the organism of the fermentative actions induced by yeast in a saccharine fluid?

4. Describe the effect of the different parts of the spectrum on plants under the headings—(*a*) chemical ; (*b*) mechanical.

5. Write a morphological account of the Gramineae. Compare the Gramineae with the Cyperaceae.

Monday, 25*th March* 1895.—1 *to* 3 *o'clock.*

(*Illustrate your Answers by Drawings.*)

1. Write an account of the General Morphology of Schizomycetes, and describe, in detail, the life-history of any one member of the group.

2. Describe, in detail, the structure of the Vascular bundle as it is found in any Monocotyledonous plant. Point out the functions of the several parts.

3. What is the influence of light upon plant-growth?

4. Give an illustrated comparative account of the mophology of the flower in Ranunculaceæ.

5. Describe the development of the Sporangium in Aspidium.

PRACTICAL BOTANY.

Monday, 23*rd July* 1894.—4 *to* 6 *o'clock.*

1. Make a series of sections of Specimen A. Leave your preparations, and sketch them sufficiently to allow of your giving a list of explanatory references.

2. Indicate, by means of flag lables, the position of the wood cambium and protoxylem in Specimen B.

3. Dissect and lay out the parts of Specimen C.

4. Draw the floral diagram of Specimen D.

5. Refer to their natural orders Specimens E, F, G, H, I.

6. By means of the flora provided name the Specimens K, L.

A. Stem of Vitis pterophora.
B. Section of Oak stem.
C. Fruit of Ficus.
D. Sanguisorba canadensis.
E. Gnaphalium supinum.
F. Polygonum Brunonis.
G. Ranunculus sceleratus.
H. Potentilla Macnabiana.
I. Bupleurum ranunculoides.
K. Chenopodium bonus-Henricus.
L. Jasione Montana.

27th March 1895.—10 *to* 1 *o'clock.*

Specimen A. Make a series of Sections. Leave your preparations and sketch them sufficiently to allow of your giving a list of explanatory references.

Specimen B. Mark with flag labels the phellogen and the medullary sheath.

Specimen C. Lay out its parts and name them.

Specimen D. Draw the flower-diagram.

Specimens E, F, G, H, I. Mention the natural order, giving your reasons in each case.

Specimens K, L. By means of the Flora provided, name the genus and species.

A. *Dracæna fragrans.*
B. Stem of *Laburnum.*
C. *Crocus vernus.*
D. *Thunbergia alata.*
E. *Euphorbia splendens.*
F. *Oxalis bupleurifolia.*
G. *Leucopogon Richei.*
H. *Centropogon Lucyanus.*
I. *Brownea coccinea.*
K. *Alnus glutinosa.*
L. *Stellaria media.*

GEOLOGY.

Tuesday, 24th July 1894.—1 *to* 2 *o'clock.*

1. Give some account of the geological action of the atmosphere.
2. How is boulder-clay proved to be of infra-glacial origin?
3. Give the mineralogical characters of Augite, Orthoclase, Pyrite, Quartz.
4. How are the contents of a Lode supposed to have been introduced?
5. Give the petrographical characters of Basalt, Pitchstone, Marble, Gneiss, and Serpentine.
6. Draw one section illustrative of the following structures:—Isoclinal Strata, Unconformity, Outlier, Inlier, Dyke, Fault.
7. Describe the structure of a Crinoid.
8. Under what conditions were the old Red Sandstone Strata of Scotland deposited?

GEOLOGY, INCLUDING MINERALOGY.

Tuesday, 26th March 1895.—1 *to* 3 *o'clock.*

(*Answer* SEVEN *questions, including* 5, 7, *and* 9.)

1. What were the chief features of Hutton's teaching?
2. By what evidence can the former existence of glaciers be proved?
3. What evidence has been adduced to prove that lands have been elevated and depressed? Mention any special cases known to you.
4. Describe the formation of soil.
5. Describe six of the most important rock-forming minerals.
6. Give the petrographical characters of the following rocks:—Greywacké, Granite, Basalt, Gneiss, Gabbro, Anthracite, Chalk.

7. Illustrate by sections the following rock-structures :—Thrust-plane, Anticline, Syncline, Isocline, Monocline, Outlier, Unconformity.

8. In what systems do the following forms make their earliest known appearance :—Brachiopods, Pulmonate Gasteropods, Fishes, and Mammals.

9. Would you expect to find the following fossils in one and the same formation :—Graptolites, Lepidodendron, Plesiosaurus, Archæopteryx, Mastodon? Give reasons for your answer.

DEPARTMENT OF HISTORY AND LAW.

GENERAL BRITISH HISTORY, A.D. 450—1688.

Saturday, 30th March 1895.—12 *to* 2 *o'clock.*

(N.B.—*Not more than* SEVEN *Questions to be attempted. The Questions should be taken from different parts of the Paper.*)

1. Discuss the arguments for and against the view that the Britons were exterminated by the English in the fifth and sixth centuries.

2. What effects did the Danish Conquests produce (*a*) on England, (*b*) on Scotland?

3. Describe the composition and powers of the National Council in Anglo-Saxon times.

4. By what steps did William I. conquer, and by what measures did he hold England?

5. What light does the reign of Stephen throw on the political and social condition of England in the twelfth century?

6. What were the component parts of Henry II.'s dominion in France? How and when were they respectively lost?

7. How was it that Edward I. conquered Wales, but was unable to conquer Scotland?

8. Compare the position of the Church in England in the thirteenth and fifteenth centuries.

9. Trace the connection between the Black Death, the Peasant's Revolt, and the Lollards.

10. Prove that the Tudors were more powerful sovereigns than the Lancastrians.

11. What Scottish kings contributed most in the Middle Ages to the establishment of Royal power, and what measures did they adopt for this purpose?

12. Examine and illustrate the aims and methods of Elizabeth's foreign policy.

13. Draw a comparison between Spenser, Milton, and Dryden, as typical of their times.

14. Contrast and illustrate the characters of the four Stuart kings of Great Britain.

15. Trace the growth of the British Colonial Empire down to 1688.

HISTORY OF THE EMPIRE, 1688—1832: FORTESCUE'S GOVERNANCE OF ENGLAND.

Saturday, 30th March 1895.—3 *to* 5 *o'clock.*

(N.B.—*Not more than* SEVEN *Questions to be attempted, of which two must be taken from the last three in the paper.*)

1. Give a short account of the state of political parties during the reign of Queen Anne. Indicate their attitude towards (*a*) The Occasional Conformity Bill; (*b*) The War of the Spanish Succession; (*c*) The Hanoverian Succession.

2. Sketch the controversy that preceded the Treaty of Union between England and Scotland, and state the main provisions of that Treaty.

3. Discuss briefly the foreign policy and financial administration of Walpole.

4. Explain the complications that led to the risings of 1715 and 1745.

5. Explain the importance of—(*a*) The Treaty of Utrecht; (*b*) The Victories of Plassey and Wandewash; (*c*) The Peace of Paris (1763), in their bearing on the growth of the British Empire.

6. Discuss the colonial policy of George III and his Ministers in connection with the American Revolution. State the views of Burke.

7. Give a short account of industrial progress in Great Britain during the latter half of the eighteenth century.

8. Write a paragraph on the influence of the French Revolution on (*a*) British foreign policy, (*b*) political thought, (*c*) domestic legislation.

9. Sketch briefly the movement that culminated in the Reform Bill of 1832, and give the main provisions of that measure.

10. Mention the principal works of Fortescue, and indicate his views on English dynastic controversies and constitutional questions in the fifteenth century.

11. Write a short description of the lawlessness and overgrown power of the English aristocracy during the Lancastrian Period. State the remedies proposed by Fortescue.

12. Modernise and comment briefly on the following passages:—

(*a*) But the grettest harme that comyth of a kynges pouerte is, that he shal bi necessite be arted to fynde exquysite meanes of geytinge of good; as to putt defaute in some of his subgettes þat bith innocentes, and vpon the riche men more þen the pore, by cause that he mey bettir pay; and to show rigoure þer as fauour awght to be shewid, and fauour þer as rigour shuld be shewid, to perversion of Justice, & perturbacion of the peas and quiete of the reaume.

(*b*) The kynges yerely expenses stonden in charges ordinarie and in charges extraordinarie. His charges ordinarie may not be eschewed, and therefore it nedith þat ther be lyvelode asseigned ffor the payment thereof; wich lyvelode be in no wyse putte to no other use.

(*c*) The kyngis counsell was wonned to be chosen off grete princes, & off the greteste lordes off þe lande, both spirituellis and temporellis, &

also off oþer men that were in grete auctorite & offices. Wich lordes and officers had nere hande also mony maters off thair oune to be treded in the counsell, as had þe kynge.

ART AND ARCHÆOLOGY.

Friday, 29*th March* 1895.—3 *to* 5 *o'clock.*

FIRST PAPER—HISTORICAL.

(*Not more than* SEVEN *Questions to be attempted.*)

1. Describe a Lake Dwelling, and notice the various arts practised by its inhabitants.

2. Give some account of the chief forms of the art of the old Empire in Egypt. Where are its remains found? What conjectures have been made as to its derivation?

3. Describe one of the great Palaces of Assyria, with reference both to its arrangement and its decoration.

4. Write a brief account of the ruins at Mycenæ, and of the works of art found there.

5. Describe the site and temples of Selinus, and mention the special points of interest connected with the latter.

6. Trace the connection of Athletics and the Dance with the development of Sculpture in Greece.

7. Explain clearly the mode of burial in the early Christian Catacombs, and indicate the points of artistic interest connected therewith.

8. How do you account for the great Architectural period in Western Europe in the thirteenth century?

9. What forces tended to produce a revival of Art in Tuscany at the close of the thirteenth century, and at Venice in the last half of the fifteenth? Mention the Artists who chiefly represent the movement in each instance.

10. Write briefly on *one* of the following:—

Fra Angelico, Giovanni Bellini, Masaccio, Luca Signorelli, Raphael before the Roman period.

Describe fully a representative work of the artist chosen.

11. Characterise the Art of Rubens. Whence is it derived, and where is its influence to be seen in later times?

12. Sketch the measures of Colbert for the organisation of Art in France, and estimate their value by their after-results.

Saturday, 30*th March* 1895.—9 *to* 11 *o'clock.*

SECOND PAPER—CRITICAL AND TECHNICAL.

(*Not more than* SEVEN *Questions to be attempted.*)

1. What should be the style of a figure sculptured in granite or similar hard material? Describe a good example.

2. Many systems of decoration have arisen through the attempt to give to new materials forms which were essential structural elements in another material. Illustrate this.

3. Contrast, with reference to examples, the artistic character of the work of Pheidias with that of Michelangelo.

4. Give, and account for, the views of Vasari as to the relation of oil painting to fresco. How far was he right in his main contention?

5. Sketch the history of landscape painting from the sixteenth century to our own time.

6. What do you consider to be the aims in his art of the modern painter of the "Impressionist" school. Illustrate your answer, if possible, by reference to some works of the day.

7. In the future, steel or some other metal may be the chief material employed for the framework of edifices of all kinds. If that is the case, what are likely to be the characteristics of architecture?

8. Wherein do the realistic statues of old Egypt fail as works of art? Would you apply the term works of art to them at all? Give reasons for your answer.

9. Describe clearly the scheme of decoration employed by Michelangelo on the roof of the Sistine Chapel.

10. Can you give any reasons why the decorative art of uncivilised peoples is so often superior to that of the most advanced races?

11. Explain the following terms:—*entasis*, *repoussé*, *scotia*, *torus*, *a fresco*, *a secco*, *rococo*, *palæolithic*, *cubiculum*, *arenarium*, *serdab*.

EXAMINATION PAPERS FOR DEGREE OF M.A. WITH HONOURS.

A.—CLASSICS.

LATIN.

Monday, 1*st April* 1895.—9 *to* 12 *o'clock.*

Translate:—

1. Quandocumque igitur nostros mors claudet ocellos,
   Accipe quae serves funeris acta mei.
   Nec mea tunc longa spatietur imagine pompa,
   Nec tuba sit fati vana querela mei,
   Nec mihi tunc fulcro sternatur lectus eburno,
   Nec sit in Attalico mors mea nixa toro.
   Desit odoriferis ordo mihi lancibus, adsint
   Plebei parvae funeris exequiae.
   Sat mea sat magnast, si tres sint pompa libelli,
   Quos ego Persephonae maxima dona feram.

Nec minus haec nostri notescet fama sepulchri,
Quam florent Phthii busta cruenta viri.
Tu quoque si quando venies ad fata, memento
Hoc iter: ad lapides cana veni memores.
Interea cave sis nos aspernata sepultos:
Nonnihil ad verum conscia terra sapit.

2. Iunonem interea compellat Iuppiter ultro:
'o germana mihi atque eadem gratissima coniunx,
ut rebare, Venus (nec te sententia fallit)
Troianas sustentat opes, non vivida bello
dextra viris animusque ferox patiensque pericli.'
cui Iuno summissa 'quid, o pulcherrime coniunx,
sollicitas aegram et tua tristia iussa timentem?
si mihi, quae quondam fuerat quamque esse decebat,
vis in amore foret, non hoc mihi namque negares,
omnipotens, quin et pugnae subducere Turnum
et Dauno possem incolumem servare parenti.
nunc pereat Teucrisque pio det sanguine poenas.
ille tamen nostra deducit origine nomen
(Pilumnusque illi quartus pater) et tua larga
saepe manu multisque oneravit limina donis."
cui rex aetherii breviter sic fatur Olympi:
'si mora praesentis leti tempusque caduco
oratur iuveni meque hoc ita ponere sentis,
tolle fuga Turnum atque instantibus eripe fatis.
hactenus indulsisse vacat. Sin altior istis
sub precibus venia ulla latet totumque moveri
mutarive putas bellum, spes pascis inanis.'
et Iuno adlacrimans 'quid si, quae voce gravaris,
mente dares atque haec Turno rata vita maneret?
nunc manet insontem gravis exitus, aut ego veri
vana feror. Quod ut o potius formidine falsa
ludar et in melius tua, qui potes, orsa reflectas!'

3. Non, quia, Maecenas, Lydorum quidquid Etruscos
Incoluit fines, nemo generosior est te;
Nec, quod avus tibi maternus fuit, atque paternus,
Olim qui magnis legionibus imperitarint;
Ut plerique solent, naso suspendis adunco
(6) Ignotos, ut me libertino patre natum.
Cum referre negas, quali sit quisque parente
Natus, dum ingenuus, persuades hoc tibi vere,
Ante potestatem Tulli atque ignobile regnum,
Multos saepe viros nullis majoribus ortos
Et vixisse probos, amplis et honoribus auctos:
Contra, Laevinum, Valeri genus, unde Superbus
Tarquinius regno pulsus fuit, unius assis

(14) Non unquam pretio pluris licuisse, notante
(15) Iudice quo nosti, populo, qui stultus honores
Saepe dat indignis, et famae servit ineptus;
Qui stupet in titulis et imaginibus. Quid oportet
Nos facere, a vulgo longe longeque remotos?
Namque esto, populus Laevino mallet honorem
Quam Decio mandare novo, censorque moveret
Appius, ingenuo si non essem patre natus—
Vel merito, quoniam in propria non pelle quiessem.

Remark on the *reading* in line 6, and the *construction* of *notante iudice, quo nosti, populo*, in lines 14, 15.

4. Accesserant praeter Trionem et Catum accusatores Fonteius Agrippa et C. Vibius, certabantque, cui ius perorandi in reum daretur: donec Vibius, quia nec ipsi inter se concederent, et Libo sine patrono introisset, singillatim se crimina obiecturum professus, protulit libellos, vecordes adeo, ut consultaverit Libo, an habiturus foret opes, quis viam Appiam Brundisium usque pecunia operiret. Inerant et alia huiuscemodi, stolida, vana: si mollius acciperas, miseranda. Uni tamen libello manu Libonis nominibus Caesarum aut senatorum additas atroces vel occultas notas accusator arguebat. Negante reo, agnoscentes servos per tormenta interrogari placuit. Et quia vetere senatusconsulto quaestio in caput domini prohibebatur, callidus et novi iuris repertor, Tiberius, mancipari singulos actori publico iubet: scilicet, ut in Libonem ex servis salvo senatusconsulto quaereretur. Ob quae posterum diem reus petivit; domumque digressus, extremas preces P. Quirinio propinquo suo ad principem mandavit.

5. Puella senibus dulcior mihi cygnis,
Agna Galaesi mollior Phalantini,
Concha Lucrini delicatior stagni,
Cui nec lapillos praeferas Erythraeos,
Nec modo politum pecudis Indicae dentem
Nivesque primas liliumque non tactum;
Quae crine vicit Baetici gregis vellus
Rhenique nodos aureamque nitellam;
Fragravit ore, quod rosarium Paesti,
Quod Atticarum prima mella cerarum,
Quod sucinorum rapta de manu gleba;
Cui comparatus indecens erat pavus,
Inamabilis sciurus et frequens phoenix:
Adhuc recenti tepet Erotion busto,
Quam pessimorum lex amara fatorum
Sexta peregit hieme, nec tamen tota,
Nostros amores gaudiumque lususque.
Et esse tristem me meus vetat Paetus,
Pectusque pulsans pariter et comam vellens:

"Deflere non te vernulae pudet mortem?
Ego coniugem 'inquit' extuli et tamen vivo,
Notam, superbam, nobilem, locupletem."
Quid esse nostro fortius potest Paeto?
Ducentiens accepit, et tamen vivit.

6. Er. Prius edico, nequis propter culpam capiatur suam:
Continete uos domi, prohibete a uobis uim meam.
He. Mira edepol sunt ni hic in uentrem sumpsit confidentiam.
Vae misero illi, quoius cibo iste factust imperiosior.
Er. Tum pistores scrofipasci, qui alunt furfuri sues,
Quarum odore praeterire nemo pistrinum potest:
Eorum si quoiusquam scrofam in puplico conspexero,
Ex ipsis dominis meis pugnis exculcabo furfures.
He. Basilicas edictiones atque imperiosas habet.
Satur homost, habet profecto in uentre confidentiam.
Er. Tum piscatores, qui praehibent populo piscis foetidos,
Qui aduehuntur quadrupedanti crucianti cantherio,
Quorum odos subbasilicanos omnis abigit in forum:
Eis ego ora uerberabo surpiculis piscariis,
Vt sciant, alieno naso quam exhibeant molestiam.
Tum lanii autem, qui concinnant liberis orbas ouis,
Qui locant caedundos agnos et dupla agninam danunt,
Qui petroni nomen indunt uerueci sectario:
Eum ego si in uia petronem puplica conspexero,
Et petronem et dominum reddam mortalis miserrumos
He. Eugepae: edictiones aedilicias hic quidem habet:
Mirumque adeost ni hunc Aetoli sibi fecere agoranomum.

7. Ecce Dolabellae comitiorum dies: sortitio praerogativae; quiescit. Renuntiatur; tacet. Prima classis vocatur, renuntiatur; deinde, ita ut adsolet, suffragia; tum secunda classis vocatur: quae omnia sunt citius facta quam dixi. Confecto negotio bonus augur—C. Laelium diceres—alio die inquit. O inpudentiam singularem! Quid videras? quid senseras? quid audieras? neque enim te de caelo servasse dixisti nec hodie dicis. Id igitur obvenit vitium, quod tu iam Kalendis Ianuariis futurum esse provideras et tanto ante praedixeras. Ergo hercule magna, ut spero, tua potius quam rei publicae calamitate ementitus es auspicia, obstrinxisti religione populum Romanum, augur auguri, consul consuli obnuntiasti. Nolo plura, ne acta Dolabellae videar convellere, quae necesse est aliquando ad nostrum collegium deferantur. Sed adrogantiam hominis insolentiamque cognoscite. Quam diu tu voles, vitiosus consul Dolabella: rursus, cum voles, salvis auspiciis creatus. Si nihil est, cum augur iis verbis nuntiat, quibus tu nuntiasti, confitere te, cum alio die dixeris, sobrium non fuisse: sin est aliqua vis in istis verbis, ea quae sit augur a collega requiro.

8. Legem etiam iudiciariam tulit, homo castus atque integer, iudiciorum et iuris auctor. In quo nos fefellit. Antesignanos et manipulares

et Alaudas iudices se constituisse dicebat. At ille legit aleatores, legit exsules, legit Graecos. O consessum iudicum praeclarum ! o dignitatem consilii admirandam ! Avet animus apud consilium illud pro reo dicere ! Cydam Cretensem, portentum insulae, hominem audacissimum et perditissimum. Sed fac non esse : num Latine scit ? num est ex iudicum genere et forma ? num, quod maximum est, leges nostras moresve novit ? num denique homines ? Est enim Creta vobis notior quam Roma Cydae. Dilectus autem et notatio iudicum etiam in nostris civibus haberi solet. Gortynium vero iudicem quis novit aut quis nosse potuit ? Nam Lysiadem Atheniensem plerique novimus. Est enim Phaedri, philosophi nobilis, filius : homo praeterea festivus, ut ei cum Curio consessore eodemque collusore facillime possit convenire.

LATIN PROSE.

Tuesday, 2nd April 1895.—9 *to* 12 *o'clock.*

The nobler the mind, the more refined and the purer the taste, the more one knows human nature, and the greater the love of truth, the more one will appreciate the works of Richardson. I have felt indignant when I have heard this author accused of being too lengthy, and of putting in too many details. It is dangerous for a man of genius to overstep the boundaries of art which have been set up by custom and time ; woe to him if he treads under foot the ancient formulas. Yet let us be reasonable. The details which Richardson gives displease, and must necessarily displease, a frivolous reader ; but he does not write for such ; he writes for the quiet solitary student who knows what the noise and pleasures of the world are worth, and who prefers a shady retreat where he can pass his hours profitably in sympathetic silence. . . . You may not care for such details, but they interest me when they are true to nature, when they show the workings of passion and the development of character. They are so commonplace, you say, just what one sees every day. But that is where you are mistaken. Such things do happen every day under your eyes, but you do not see them. You have seen the sun set and the stars rise a hundred times ; you have often heard the joyous burst of song from the birds in the woods. But which of you has realised that it is the contrast with the noises of the daylight hours which makes the silent hours of night so impressive ? It is the same in regard to moral phenomena ; you have often seen the ebullitions of passion among men, but you could not understand all the hidden meanings in their tones or in their facial expressions. Each passion has its own mode of expression, and these different expressions may follow each other on the same countenance without its ceasing to be the same. The art of the great poet and the great painter is to make you conscious of some quickly passing mood which has escaped your observation. Painters, poets, men of taste, men of good feeling, you should read Richardson and read him constantly. DIDEROT.

GENERAL PAPER.

Wednesday, 3rd April 1895.—9 *to* 12 *o'clock.*

I. Translate and explain :—

1. Hunc duo sectati fratres, Aquilonia proles,
Hunc super et Zetes, hunc super et Calais,
Oscula suspensis instabant carpere palmis,
Oscula et alterna ferre supina fuga.
Ille sub extrema pendens secluditur ala
Et volucres ramo submovet insidias.

2. Quid genus aut virtus aut optima profuit illi
Mater, et amplexum Caesaris esse focos?
Aut modo tam pleno fluitantia vela theatro
Et per maternas omnia gesta manus?

3. Immatura licet, tamen huc non noxia veni :
Det pater hic umbrae mollia iura meae.
Aut siquis posita iudex sedet Aeacus urna,
Is mea sortita vindicet ossa pila :
Adsideant fratres iuxta et Minoida sellam
Eumenidum intento turba severa foro.

4. At si cognatos, nullo natura labore
Quos tibi dat, retinere velis servareque amicos,
Infelix operam perdas : ut siquis asellum
In campo doceat parentem currere frenis.

5. Abnuere et tabulas a te removere memento,
Sic tamen, ut limis rapias, quid prima secundo
Cera velit versu.

6. Debemur morti nos, nostraque : sive receptus
Terra Neptunus classes Aquilonibus arcet,
Regis opus, sterilisve *diu palus, aptaque remis,
Vicinas urbes alit, et grave sentit aratrum.

7. Idem annus novas caerimonias accepit, addito sodalium Augustalium sacerdotio : ut quondam T. Tatius retinendis Sabinorum sacris sodales Titios instituerat.

8. Achaiam ac Macedoniam, onera deprecantis, levari in praesens proconsulari imperio, tradique Caesari placuit.

9. Tum Cn. Pompeius tertium consul, corrigendis moribus delectus, et gravior remediis, quam delicta erant, suarumque legum auctor idem ac subversor, quae armis tuebatur, armis amisit.

10. Et erat isdem regionibus Curtius Lupus quaestor, cui provincia, vetere ex more, * Calles evenerat.

* *Discuss the Reading.*

11. Sextiliane, bibis quantum subsellia quinque
Solus : aqua totiens ebrius esse potes ;
Nec consessorum vicina nomismata tantum,
Aera sed a cuneis ulteriora bibis.

12. I nunc, edere me iube libellos :
Lectis vix tibi paginis duabus
Spectas eschatocollion, Severe,
Et longas trahis oscitationes.
Haec sunt, quae relegente me solebas
Rapta exscribere, set Vitellianis.

13. Sili, Castalidum decus sororum,
. . . . .
Paulum seposita severitate,
Dum blanda vagus alea December
Incertis sonat hinc et hinc fritillis
Et ludit * tropa nequiore talo,
Nostris otia commoda Camenis :

14. Er : Oieï : huic illut dolet,
Quia nunc remissus est edundi exercitus.
He : Nullumne interea nanctu's, qui posset tibi
Remissum quem dixti imperare exercitum.

15. Lo : Nunc servitus si evenit, ei vos morigerari mos bonust
† eamque etiam erili imperio ingeniis vostris lenem reddere.
Ca : Oh. Lo : Eiulatione haut opus est : oculis † multa miraclitis.

16. Ph : De magnis divitiis si quid demas, plus fit an minus?
Lv : minus, pater : set civi inmoeni scin quid cantari solet?
Quod habes ne habeas et nunc quod non habes habeas velim,
quandoquidem nec tibi bene esse pote pati neque alteri.

17. Nihil est profecto stultius neque stolidius
. . . . . .
Quam urbani adsidui cives, quos scurras vocant.
Atque egomet me adeo cum illis una ibidem traho ;
Qui illorum verbis falsis acceptor fui,
Qui omnia se simulant scire neque quicquam sciunt.

18. Benefacta benefactis aliis pertegito, ne perpluant :
Is probust quem poenitet quam probus sit et frugi bonae.

II. Answer any *three* of the following :—

1. What were the chief features of the Sullan constitution?

* *Discuss the Reading.* † *Emend.*

2. What is the evidence for Caesar's complicity in the conspiracy of Cataline?

3. Describe the constitutional methods by which Augustus built up his position as Emperor.

4. What was the approximate strength of the standing army at the accession of Tiberius, and how was it disposed?

5. Discuss the view taken by Tacitus of the character of Tiberius: account for the bias of Tacitus, and shew how the bias may have been increased by some of the authorities on which he relied.

6. Sketch briefly Cicero's career and policy from 57 B.C. till his death.

III. Answer any *two* of the following:—

1. *Satira tota nostra est.* Criticise this remark of Quintilian's.

2. Compare the elegiac metre of Propertius with that of Catullus.

3. What is the relation between the Epigrams of Martial and the Satires of Juvenal? Illustrate your answer by quotations from, or reference to, passages in both authors.

4. Trace the origin and development of the *Epigram*, and shew what share Martial had in its development.

5. The language of Cicero's letters often resembles that of Plautine Comedy: account for this, and illustrate your answer by instances.

LATIN.—UNSEEN TRANSLATION.

Thursday, 4th April 1895.—9 *to* 12 *o'clock.*

Translate:—

1. Ut illum di perdant, primus qui horas repperit,
Quique adeo primus statuit hic solarium.
Qui mihi comminuit misero articulatim diem.
Nam [olim] me puero venter erat solarium
Multo omnium istorum optumum et verissimum:
Ubi ubi monebat esse, nisi quom nil erat.
Nunc etiam quom est, non estur, nisi soli lubet.
Itaque adeo iam oppletum oppidumst solariis
Maior pars populi [ut] aridi reptent fame.

AQUILIUS (?).

2. Ex hoc illud est natum, quod postulabat Hortensius, ut id ipsum saltem perceptum a sapiente diceretis, nihil posse percipi. Sed Antipatro hoc idem postulanti, cum diceret ei, qui adfirmaret nihil posse percipi, unum tamen illud dicere percipi posse consentaneum esse, ut alia non possent, Carneades acutius resistebat. Nam tantum abesse dicebat, ut id consentaneum esset, ut maxime etiam repugnaret. Qui enim negaret quicquam esse quod perciperetur, eum nihil excipere: ita necesse esse, ne id ipsum quidem, quod exceptum non esset, compre-

hendi et percipi ullo modo posso. Antiochus ad istum locum pressius videbatur accedere. Quoniam enim id haberent Academici decretum, nihil posse percipi, non debere eos in suo decreto, sicut in ceteris rebus, fluctuare, praesertim cum in eo summa consisteret : hanc enim esse regulam totius philosophiae, constitutionem veri falsi cogniti incogniti : quam rationem quoniam susciperent docereque vellent quae visa accipi oporteret, quae repudiari, certe hoc ipsum, ex quo omne veri falsique iudicium esset, percipere eos debuisse : etenim duo esse haec maxima in philosophia, iudicium veri et finem bonorum, nec sapientem posse esse qui aut cognoscendi esse initium ignoret aut extremum expetendi, ut aut unde proficiscatur aut quo perveniendum sit nesciat ; haec autem habere dubia nec eis ita confidere, ut moveri non possint, abhorrere a sapientia plurimum.

Cic., *Prior Acad.* ix. (28, 29).

3. "Qui modo in absentem voltu dextraque furebas,
Miles, habes nudum promptumque ad volnera pectus.
Hic, fuge, si belli finis placet, ense relicto.
Detegit imbelles animos nil fortiter ausa
Seditio tantumque fugam meditata iuventus
Ac ducis invicti rebus lassata secundis.
Vadite meque meis ad bella relinquite fatis ;
Invenient haec arma manus, vobisque repulsis
Tot reddet Fortuna viros quot tela vacabunt.
Anne fugam Magni tanta cum classe sequontur
Hesperiae gentes, nobis victoria turbam
Non dabit, impulsi tantum quae praemia belli
Auferat, et vestri rapta mercede laboris
Lauriferos nullo comitetur volnere currus ?
Vos despecta, senes, exhaustaque sanguine turba
Cernetis nostros, iam plebs Romana, triumphos.
Caesaris an cursus vestrae sentire putatis
Damnum posse fugae ? Veluti si cuncta minentur
Flumina quos miscent pelago subducere fontes,
Non magis ablatis unquam descenderet aequor
Quam nunc crescit aquis. An vos momenta putatis
Ulla dedisse mihi ? Nunquam sic cura deorum
Se premit ut vestrae morti vestraeque saluti
Fata vacent. Procerum motus haec cuncta sequontur."

Lucan : v. 319-342.

4. Quare quaedam aquae caleant, quaedam etiam ferveant in tantum, ut non possint esse usui nisi aut in aperto evanuere aut mixtura frigidae intepuere, plures causae redduntur. Empedocles existimat ignibus, quos multis locis terra opertos tegit, aquam calescere, si subiecti sunt solo per quod aquis transcursus est. Facere solemus dracones et miliaria et complures formas, in quibus aere tenui fistulas struimus, per

declive circumdatas, ut saepe eundem ignem ambiens aqua per tantam fluat spatii quantum efficiendo calori sat est. Frigida itaque intrat, effluit calida. Idem sub terra Empedocles existimat fieri: quem non falli credent ii quibus balnearia sine igne calefiunt. Spiritus in illa fervens loco aestuanti infunditur. Hic per rivos lapsus, non aliter quam igne subdito, parietes et vasa balnei calefacit. Omnis denique frigida transitu mutatur in calidam, nec trahit saporem evaporatio, quia clausa perlabitur. . . . Quosdam lacus esse, qui nandi imperitos ferant, notum est. Erat in Sicilia, est adhuc in Syria stagnum, in quo natant lateres, et mergi proiecta non possunt, licet gravia sint. Huius rei palam causa est: quamcumque vis rem expende, et contra aquam statue, dummodo utriusque par fit modus: si aqua gravior est leviorem rem quam ipsa est feret et tanto supra se extollet quanto erit levior; graviora descendent. At si aquae et eius rei quam contra pensabis par pondus erit, nec pessum ibit nec exstabit sed aequabitur aquae, et natabit quidem sed paene mersa ac nulla eminens parte. Hoc est cur quaedam tigna ad aequilibrium aquae descendant. Namque quum utriusque pondus par est, neutraque res alteri cedit, graviora descendunt, leviora gestantur. Grave autem et leve est, non aestimatione nostra, sed comparatione eius quo vehi debet.

SENECA, *Quaest. Nat.* iii. 24.

GREEK.

Monday, April 1, 1895.—2 *to* 5 *o'clock.*

Translate, with short notes where you think them necessary to supplement your translation :—

1. Ὣς φάτ' Ἀθηναίη, τῷ δὲ φρένας ἄφρονι πείθεν·
αὐτίκ' ἐσύλα τόξον ἐϋξοον ἰξάλου αἰγὸς
ἀγρίου, ὅν ῥά ποτ' αὐτὸς ὑπὸ στέρνοιο τυχήσας
πέτρης ἐκβαίνοντα, δεδεγμένος ἐν προδοκῆσιν,
βεβλήκει πρὸς στῆθος· ὁ δ' ὕπτιος ἔμπεσε πέτρῃ.
τοῦ κέρα ἐκ κεφαλῆς ἐκκαιδεκάδωρα πεφύκει·
καὶ τὰ μὲν ἀσκήσας κεραοξόος ἤραρε τέκτων,
πᾶν δ' εὖ λειήνας χρυσέην ἐπέθηκε κορώνην.
καὶ τὸ μὲν εὖ κατέθηκε τανυσσάμενος ποτὶ γαίῃ
ἀγκλίνας· πρόσθεν δὲ σάκεα σχέθον ἐσθλοὶ ἑταῖροι,
μὴ πρὶν ἀναΐξειαν Ἀρήϊοι υἷες Ἀχαιῶν,
πρὶν βλῆσθαι Μενέλαον Ἀρῄϊον Ἀτρέος υἱόν.
αὐτὰρ ὁ σύλα πῶμα φαρέτρης, ἐκ δ' ἕλετ' ἰὸν
ἀβλῆτα, πτερόεντα, μελαινέων ἔρμ' ὀδυνάων·
αἶψα δ' ἐπὶ νευρῇ κατεκύσμει πικρὸν ὀϊστὸν,
εὔχετο δ' Ἀπόλλωνι Λυκηγενέϊ κλυτοτόξῳ
ἀρνῶν πρωτογόνων ῥέξειν κλειτὴν ἑκατόμβην
οἰκαδε νοστήσας ἱερῆς εἰς ἄστυ Ζελείης.
ἕλκε δ' ὁμοῦ γλυφίδας τε λαβὼν καὶ νεῦρα βόεια·

νευρὴν μὲν μαζῷ πέλασεν, τόξῳ δὲ σίδηρον.
αὐτὰρ ἐπειδὴ κυκλοτερὲς μέγα τόξον ἔτεινεν,
λίγξε βιὸς, νευρὴ δὲ μέγ' ἴαχεν, ἆλτο δ' ὀϊστὸς
ὀξυβελὴς, καθ' ὅμιλον ἐπιπτέσθαι μενεαίνων.

Iliad, iv. 104-126.

2. (*a*.) Ἴδετ' ἐν χορόν, Ὀλύμπιοι,
ἔπι τε κλυτὰν πέμπετε χάριν, θεοί,
πολύβατον οἵτ' ἄστεος ὀμφαλὸν θυόεντα
ἐν ταῖς ἱεραῖς Ἀθάναις
οἰχνεῖτε πανδαίδαλόν τ' εὐκλέ' ἀγοράν·
ἰοδέτων λάχετε στεφάνων, τᾶν τ' ἐαριδρόπων
λοιβᾶν, Διόθεν τέ με σὺν ἀγλαΐᾳ
ἴδετε πορευθέντ' ἐς ἀοιδὰν δεύτερον
ἐπί τε κισσοδέταν θεόν,
τὸν Βρόμιον τὸν Ἐριβόαν τε βροτοὶ καλέομεν.
Γόνον ὑπάτων μὲν πατέρων μελπέμεν
γυναικῶν τε Καδμειᾶν ἔμολον.
Ἐν Ἀργείᾳ Νεμέᾳ μάντιν οὐ λανθάνει
*φοινικοεάνων ὀπόθ' οἰχθέντος Ὡρᾶν θαλάμου
εὔοδμον ἐπαΐωσιν ἔαρ φυτὰ νεκτάρεα.
Τότε βάλλεται, τότ' ἐπ' ἀμβρόταν χέρσον ἐραταί
ἴων φόβαι, ῥόδα τε κόμαισι μίγνυται,
ἀχεῖται τ' ὀμφαὶ μελέων σὺν αὐλοῖς
ἀχεῖται Σεμέλαν ἑλικάμπυκα χοροί.

PINDAR, *Frag.* 45.

* MSS. *φοίνικος ἐανῶν*. Böckh, *φοίνικος ἔρνος*.

(*b*) Ἦ οὐκ ὀρῇς; ὁ μὲν κέλης
Ἐνετικός, ἁ δὲ χαίτα
τᾶς ἐμᾶς ἀνεψιᾶς
Ἀγησιχόρας ἐπανθεῖ
χρυσὸς ὣς ἀκήρατος,
τό τ' ἀργύριον πρόσωπον
διαφάδαν—τί τοι λέγω;—
Ἀγησιχόρα, μέν' αὔτα.—
ἁ δὲ δευτέρα πεδ' Ἀγιδὼν τὸ εἶδος
ἵππος εἰβήνῳ κόλαξ αἰὲς δραμεῖται·
ταὶ πελειάδες γὰρ ἁμίν
Ὀρθίᾳ φάρος φεροίσαις
νύκτα δι' ἀμβροσίαν ἄτε σείριον
ἄστρον αὐειρόμεναι μάχονται.

ALCMAN, *Frag.* 23.

3. (*a*) ΚΑΥ. *ὁρᾶτε πληγὰς τάσδε καρδίας ὄθεν·
εὔδουσα γὰρ φρὴν ὄμμασιν λαμπρύνεται·
ἐν ἡμέρᾳ δὲ μοῖρ' ἀπρόσκοπος βροτῶν.

ἦ πολλὰ μὲν δὴ τῶν ἐμῶν ἐλείξατε·
χοάς τ' ἀοίνους, νηφάλια μειλίγματα,
καὶ νυκτίσεμνα δεῖπν' ἐπ' ἐσχάρᾳ πυρὸς
ἔθυον, ὥραν οὐδενὸς κοινὴν θεῶν.
καὶ πάντα ταῦτα λάξ ὀρῶ πατούμενα·
ὁ δ' ἐξαλύξας οἴχεται νεβροῦ δίκην,
καὶ ταῦτα κούφως ἐκ μέσων ἀρκυστάτων
ὥρουσεν, ὑμῖν ἐγκατιλλώψας μέγα.

AESCH., *Eumen.* 103-113.

* MSS. ὄρα δὲ πληγὰς τάσδε καρδίᾳ σέθεν. Discuss this.

(*b*)

οὐκ ἔφα τις
θεοὺς βροτῶν ἀξιοῦσθαι μέλειν
ὅσοις ἀθίκτων χάρις
πατοῖθ'· ὁ δ' οὐκ εὐσεβής.
πέφανται δ' *ἐκτίνου-
σα τόλμα τῶν Ἄρη
πνεόντων μεῖζον ἢ δικαίως,
φλεόντων δωμάτων ὑπέρφευ
ὑπὲρ τὸ βέλτιστον. ἔστω δ' ἀπήμαντον, ὥστ' ἀπαρκεῖν
εὖ πραπίδων λαχόντα.
οὐ γὰρ ἔστιν ἔπαλξις
πλούτου πρὸς κόρον ἀνδρὶ
λακτίσαντι μέγαν δίκας βωμὸν εἰς ἀφάνειαν.

AESCH., *Agam.* 369-384.

* MSS. ἐγγόνους ἀτολμήτων. Write a note on the reading.

4. Ἐκ δὲ τῶν εἰρημένων τεκμηρίων ὅμως τοιαῦτα ἄν τις νομίζων μάλιστα ἃ διῆλθον οὐχ ἁμαρτάνοι, καὶ οὔτε ὡς ποιηταὶ ὑμνήκασι περὶ αὐτῶν ἐπὶ τὸ μεῖζον κοσμοῦντες μᾶλλον πιστεύων, οὐδὲ ὡς λογογράφοι ξυνέθεσαν ἐπὶ τὸ προσαγωγότερον τῇ ἀκροάσει ἢ ἀληθέστερον, ὕντα ἀνεξέλεγκτα καὶ τὰ πολλὰ ὑπὸ χρόνου αὐτῶν ἀπίστως ἐπὶ τὸ μυθῶδες ἐκνενικηκότα, εὑρῆσθαι δὲ ἡγησάμενος ἐκ τῶν ἐπιφανεστάτων σημείων ὡς παλαιὰ εἶναι ἀποχρώντως. καὶ ὁ πόλεμος οὗτος, καίπερ τῶν ἀνθρώπων, ἐν ᾧ μὲν ἂν πολεμῶσι, τὸν παρόντα ἀεὶ μέγιστον κρινόντων, παυσαμένων δὲ τὰ ἀρχαῖα μᾶλλον θαυμαζόντων, ἀπ' αὐτῶν τῶν ἔργων σκοποῦσι δηλώσει ὅμως μείζων γεγενημένος αὐτῶν. . . . καὶ ἐς μὲν ἀκρόασιν ἴσως τὸ μὴ μυθῶδες αὐτῶν ἀτερπέστερον φανεῖται· ὅσοι δὲ βουλήσονται τῶν τε γενομένων τὸ σαφὲς σκοπεῖν καὶ τῶν μελλόντων ποτὲ αὖθις κατὰ τὸ ἀνθρώπειον τοιούτων ἢ παραπλησίων ἔσεσθαι ὠφέλιμα κρίνειν αὐτὰ ἀρκούντως ἕξει. κτῆμά τε ἐς ἀεὶ μᾶλλον ἢ ἀγώνισμα ἐς τὸ παραχρῆμα ἀκούειν ξυγκεῖται.

THUCYD., i. 21-22.

5. ὥσπερ δὲ καὶ τὰ σπουδαῖα μάλιστα ποιητὴς Ὅμηρος ἦν, μόνος γὰρ οὐχ ὅτι εὖ ἀλλ' ὅτι καὶ μιμήσεις δραματικὰς ἐποίησεν, οὕτως καὶ τὰ τῆς κωμῳδίας σχήματα πρῶτος ὑπέδειξεν οὐ ψόγον ἀλλὰ τὸ γελοῖον δραματοποιήσας. παραφανείσης δὲ τῆς τραγῳδίας καὶ κωμῳδίας οἱ ἐφ' ἑκατέραν τὴν ποίησιν ὁρμῶντες κατὰ τὴν οἰκείαν φύσιν οἱ μὲν ἀντὶ τῶν ἰάμβων κωμῳδοποιοὶ ἐγένοντο, οἱ δὲ ἀντὶ τῶν ἐπῶν τραγῳδιδάσκαλοι διὰ τὸ μείζονα καὶ

*ἐντιμότερα τὰ σχήματα εἶναι ταῦτα ἐκείνων. τὸ μὲν οὖν ἐπισκοπεῖν ἆρ' ἔχει ἥδη ἡ τραγῳδία τοῖς εἴδεσιν ἱκανῶς ἢ οὔ, αὐτό τε καθ' αὑτὸ *κρίνεται ἢ ναί καὶ πρὸς τὰ θέατρα, ἄλλος λόγος. γενομένης οὖν ἀπ' ἀρχῆς αὐτοσχεδιαστικῆς, καὶ αὐτὴ καὶ ἡ κωμῳδία, καὶ ἡ μὲν ἀπὸ τῶν ἐξαρχόντων τὸν διθύραμβον, ἡ δὲ ἀπὸ τῶν τὰ φαλλικὰ ἃ ἔτι καὶ νῦν ἐν πολλαῖς τῶν πόλεων διαμένει νομιζόμενα, κατὰ μικρὸν ηὐξήθη προαγόντων ὅσον ἐγίγνετο φανερὸν αὐτῆς, καὶ πολλὰς μεταβολὰς μεταβαλοῦσα ἡ τραγῳδία ἐπαύσατο, ἐπεὶ ἔσχε τὴν αὑτῆς φύσιν.*

ARIST., *Poet.* ch. iv., 1448 *b* 34-1449 *a* 15.

* *κρίνεται ἦναι. καὶ* 'A. *κρίνεται εἶναι καὶ* apogr. Discuss the reading.

Tuesday, 2nd April 1895.—2 *to* 4.30 *o'clock.*

For Greek Prose :—

Well, then, what if we tried to rise above the idea of class to the idea of the whole community, *the State*, and to find our centre of light and authority there? Every one of us has the idea of country, as a sentiment; hardly any one of us has the idea of *the State*, as a working power. And why? Because we habitually live in our ordinary selves, which do not carry us beyond the ideas and wishes of the class to which we happen to belong. And we are all afraid of giving to the State too much power, because we only conceive of the State as something equivalent to the class in occupation of the executive government, and are afraid of that class abusing power to its own purposes. If we strengthen the State with the aristocratic class in occupation of the executive government, we imagine we are delivering ourselves up captive to the ideas and wishes of our fierce aristocratical baronet; if with the working class, to those of its notorious tribune, Mr Bradlaugh. And with much justice; owing to the exaggerated notion which we English, as I have said, entertain of the right and blessedness of the mere doing as one likes, of the affirming oneself, and oneself just as it is. By our every-day selves, however, we are separate, personal, at war; we are only safe from one another's tyranny when no one has any power; and this safety, in its turn, cannot save us from anarchy. And when, therefore, anarchy presents itself as a danger to us, we know not where to turn.—MATTHEW ARNOLD.

Wednesday, 3rd April 1895.—2 *to* 5 *o'clock.*

I. Translate the following passages, with short notes illustrative of Homeric syntax :—

(*a*) *εἰ μέν τις τὸν ὄνειρον Ἀχαιῶν ἄλλος ἐνισπεν,*
ψεῦδός κεν φαῖμεν καὶ νοσφιζοίμεθα μᾶλλον.

(*b*) *οὐκ ἄν τοι χραίσμῃ κλθαρις τά τε δῶρ' Ἀφροδίτης,*
ἥ τε κόμη τό τε εἶδος, ὅτ' ἐν κονίῃσι μιγείης.

(*c*) *ἦ τ' ἐφάμην τίσασθαι Ἀλέξανδρον κακότητος·*
νῦν δέ μοι ἐν χείρεσσιν ἄγη ξίφος, ἐκ δέ μοι ἔγχος
ἠΐχθη παλάμηφιν ἐτώσιον, οὐδ' ἔβαλόν μιν.

(*d*) πολλὰ δ' ἄρ' ἔνθα καὶ ἔνθ' ἴθυσε μάχη πεδίοιο.
(*e*) ὣς εἰπὼν οὗ παιδὸς ὀρέξατο φαίδιμος Ἕκτωρ.
(*f*) οἱ δ' ἐπεὶ οὖν ᾖχοντο ἰδὲ πρὸ ὁδοῦ ἐγένοντο.
(*g*) Ἑπτίων, ὃς ἔναιεν ὑπὸ Πλάκῳ ὑληέσσῃ,
Θήβῃ Ὑποπλακίῃ, Κιλίκεσσ' ἀνδρεσσιν ἀνάσσων·
τοῦ περ δὴ θυγάτηρ ἔχεθ' Ἕκτορι χαλκοκορυστῇ.
(*h*) ἦγαγε Σιδονίηθεν, ἐπιπλὼς εὐρέα πόντον,
τὴν ὁδὸν ἣν Ἑλένην περ ἀνήγαγεν εὐπατέρειαν.

II. Translate, with notes :—

(*a*) Μέλαγχρος αἴδως ἄξιος εἰς πόλιν.
(*b*) ἐμοὶ δ' ἔρος
οὐδεμίαν κατάκοιτος ὥραν, ἀθ' ὑπὸ στεροπᾶς φλέγων
Θρηΐκιος Βορέας, ἀΐσσων παρὰ Κύπριδος ἀζαλέαις
μανίαισιν ἐρεμνὸς ἀθαμβής
ἐγκρατέως παιδόθεν φυλάσσει
ἀμετέρας φρένας.
(*c*) Ἰσθμοῖ δ' ἐπανδόκευε γλοιῶς
ψυχρὰ κρέα παρέχων·
οἱ δ' ἥσθιον κηὔχοντο μὴ ὥραν Θεμιστοκλέος γενέσθαι.
(*d*) ἰδοῦ δὲ γένναν εὖνιν ἀετοῦ πατρός,
θανόντος ἐν πλεκταῖσι καὶ σπειράμασι
δεινῆς ἐχίδνης. τοὺς δ' ἀπωρφανισμένους
νῆστις πιέζει λιμός. οὐ γὰρ ἐντελεῖς
θήραν πατρῴαν προσφέρειν σκηνήμασιν.
(*e*) καὶ νῦν Ὀρέστης—ἦν γὰρ εὐβούλως ἔχων,
ἔξω κομίζων ὀλεθρίου πηλοῦ πόδα—
νοῦν δ' ἥπερ ἐν δόμοισι βακχείας καλῆς
ἰατρὸς ἐλπὶς ἦν, † παροῦσαν ἐγγράφει.†
(*f*) νικᾷ δ' Ὀρέστης, κἂν ἰσύψηφος κριθῇ.
(*g*) δίκα δὲ τοῖς μὲν παθοῦσιν μαθεῖν ἐπιρρέπει· τὸ μέλλον *δ'
ἐπεὶ γένοιτ' ἂν κλύοις, *πρὸ χαιρέτω.

* τὸ δὲ προκλύειν after μέλλον, B. Fl. G. προχαιρέτω MSS.

III. (*a*) Translate, with a note on the dialect : —

(1) Γλαυκώπιδα Κασσάνδραν ἐρασιπλόκαμον κούραν Πριάμοιο
φάμις ἔχησι βροτῶν.
(2) Μέμφομαι δὲ καὶ λιγοῦρὰν Μουρτίδ' ἰώνγα,
ὅτι βανὰ φοῦσ' ἔβα Πινδάροιο ποτ' ἔριν.

(*b*) Scan the following lines, giving the name of the metre :—

(1) Πίνωμεν· τί τὰ λύχν' ὀμμένομεν ; δάκτυλος ἀμέρα.
(2) κῆ δ' ἀμβροσίας μὲν κράτηρ ἐκέκρατο.
(3) ἠρίστησα μὲν ἰτρίου
λεπτοῦ μικρὸν ἀποκλάς.
(4) ἀντὶ τᾶς ἔγω οὐδὲ Λυδίαν παῖσαν οὐδ' ἐράνναν.
(5) μεγάλῳ δηῦτε μ' Ἔρως ἔκοψεν ὥστε χαλκεύς.

IV. Translate, with notes :—

(*a*) Καὶ Λακεδαιμονίοις μὲν πρὸς ταῖς αὐτοῦ ὑπαρχούσαις ἐξ Ἰταλίας καὶ Σικελίας τοῖς τἀκείνων ἑλομένοις ναῦς ἐπετάχθησαν ποιεῖσθαι κατὰ μέγεθος τῶν πόλεων.

(*b*) Ξυνελών τε λέγω τήν τε πᾶσαν πόλιν τῆς Ἑλλάδος παίδευσιν εἶναι καὶ καθ' ἕκαστον δοκεῖν ἂν μοι τὸν αὐτὸν ἄνδρα παρ' ἡμῶν ἐπὶ πλεῖστ' ἂν εἴδη καὶ μετὰ χαρίτων μάλιστ' ἂν εὐτραπέλως τὸ σῶμα αὔταρκες παρέχεσθαι.

(*c*) τοῦ μήκους ὅρος μὲν πρὸς τοὺς ἀγῶνας καὶ τὴν αἴσθησιν οὐ τῆς τέχνης ἐστίν· εἰ γὰρ ἔδει ἑκατὸν τραγῳδίας ἀγωνίζεσθαι, πρὸς κλεψύδρας ἂν ἠγωνίζοντο, ὥσπερ ποτὲ καὶ ἄλλοτέ φασιν.

(*d*) ἔστι δὲ περιπέτεια μὲν ἡ εἰς τὸ ἐναντίον τῶν πραττομένων μεταβολή.

(*e*) σημεῖον δέ, ὅσοι πέρσιν Ἰλίου ὅλην ἐποίησαν καὶ μὴ κατὰ μέρος ὥσπερ Εὐριπίδης, ‹ἢ› Νιόβην καὶ μὴ ὥσπερ Αἰσχύλος, ἢ ἐκπίπτουσιν ἢ κακῶς ἀγωνίζονται, ἐπεὶ καὶ Ἀγάθων ἐξέπεσεν ἐν τούτῳ μόνῳ. ἐν δὲ ταῖς περιπετείαις καὶ ἐν τοῖς ἁπλοῖς πράγμασι στοχάζονται ὧν βούλονται θαυμαστῶς· τραγικὸν γὰρ τοῦτο καὶ φιλάνθρωπον.

(*f*) πρῶτον μὲν οὐ τῆς ποιητικῆς ἡ κατηγορία ἀλλὰ τῆς ὑποκριτικῆς, ἐπεὶ ἔστι περιεργάζεσθαι τοῖς σημείοις καὶ ῥαψῳδοῦντα, ὅπερ [ἐστὶ] Σωσίστρατος, καὶ διᾴδοντα, ὅπερ ἐποίει Μνασίθεος ὁ Ὀπούντιος.

V. Answer any *two* of the following :—

(1) Give the chief characteristics of the Lesbian dialect.

(2) What did Terpander, Alcman, Lasus, and Stesichorus respectively contribute to the development of Melic poetry?

(3) Trace the growth of the Orestes myth from Homer to Aeschylus. How far is our knowledge supplemented by evidence from Greek Art?

(4) Compare the Sapphics and Alcaics of Horace with those of his Greek originals, illustrating your answer by quotations from Sappho and Alcaeus.

(5) What degree of support does Aristotle's *Poetics* lend to the doctrine of the Three Unities?

VI. Answer any *two* of the following :—

(1) Trace the history of the Areopagus down to the restoration of the Democracy.

(2) Describe carefully the constitution of the Four Hundred, noting any discrepancies between Thucydides and Aristotle.

(3) What doubts have been cast on the trustworthiness of Thucydides —(*a*) from the evidence of inscriptions, (*b*) from internal evidence?

Thursday, 4th April 1895.—2 *to* 5 *o'clock.*

UNSEEN PASSAGES.

Translate :—

I. ΤΤ. ὁ μητροφόντης ὅδε πρὸ δωμάτων δράκων
στίλβει νοσώδεις ἀστραπάς, στύγημ' ἐμόν.
Μενέλαε, προσφθέγγει νιν, ἀνόσιον κάρα;
ΜΕ. τί γάρ; φίλου μοι πατρός ἐστιν ἔγκονος.

ΤΥ. κείνου γὰρ ὅδε πέφυκε, τοιοῦτος γεγώς ;
ΜΕ. πέφυκεν· εἰ δὲ δυστυχεῖ, τιμητέος.
ΤΥ. βεβαρβάρωσαι χρόνιος ὢν ἐν βαρβάροις.
ΜΕ. Ἑλληνικόν τοι τὸν ὀμόθεν τιμᾶν ἀεί.
ΤΥ. καὶ τῶν νόμων γε μὴ πρότερον εἶναι θέλειν.
ΜΕ. πᾶν τοὔξ ἀνάγκης δοῦλόν ἐστ' ἐν τοῖς σοφοῖς.
ΤΥ. κέκτησό νυν σὺ τοῦτ', ἐγὼ δ' οὐ κτήσομαι.
ΜΕ. ὀργὴ γὰρ ἅμα σου καὶ τὸ γῆρας οὐ σοφόν.
ΤΥ. πρὸς τόνδε σοφίας τίς ἂν ἀγὼν ἥκοι περί ; (491)
εἰ τὰ καλὰ πᾶσι φανερὰ καὶ τὰ μὴ καλά,
τούτου τίς ἀνδρῶν ἐγένετ' ἀσυνετώτερος,
ὅστις τὸ μὲν δίκαιον οὐκ ἐσκέψατο,
οὐδ' ἦλθεν ἐπὶ τὸν κοινὸν Ἑλλήνων νόμον ;
ἐπεὶ γὰρ ἐξέπνευσεν Ἀγαμέμνων βίον
πληγεὶς θυγατρὸς τῆς ἐμῆς ὑπὲρ κάρα, (497)
αἴσχιστον ἔργον, οὐ γὰρ αἰνέσω ποτέ,
χρῆν αὐτὸν ἐπιθεῖναι μὲν αἵματος δίκην
ὁσίαν διώκοντ', ἐκβαλεῖν τε δωμάτων
μητέρα· τὸ σῶφρόν τ' ἔλαβεν ἂν τῆς συμφορᾶς,
καὶ τοῦ νόμου τ' ἂν εἶχετ' εὐσεβής τ' ἂν ἦν.
νῦν δ' εἰς τὸν αὐτὸν δαίμον' ἦλθε μητέρι.

Give briefly the connection of thought in lines 486-491.

Line 491, MSS. *πρὸς τόνδ' ἀγών τις σοφίας ἥκει πέρι* ; Offer any other emendation that occurs to you.

Line 497, best MSS. *πληγεὶς τῆς ἐμῆς θυγατρὸς*, κ.τ.λ. Write a note on the line, justifying or correcting the reading in the text.

EURIPID. *Orestes*, 479-504.

II. ὡς δ' ὑπότ', ἀμφ' οὔροισιν ἐγειρομένου πολέμοιο,
δείσας γειομόρος, μή οἱ προτάμωνται ἀρούρας,
ἅρπην εὐκαμπῆ νεοθηγέα χερσὶ μεμαρπώς,
ὠμὸν ἐπισπεύδων κείρει στάχυν, οὐδὲ βολῇσι
μίμνει ἐς ὡραίην τερσήμεναι ἠελίοιο·
ὣς τότε Γηγενέων κεῖρε στάχυν· αἵματι δ' ὀλκοὶ
ἠΰτε κρηναῖαι ἀμάραι πλήθοντο ῥοῇσι.
πίπτον δ', οἱ μὲν ὀκλάξ, τετρηχότα βῶλον ὀδοῦσι
λαζόμενοι πρηνεῖς· οἱ δ', ἔμπαλιν· οἱ δ', ἐπ' ἀγοστῷ
καὶ πλευροῖς, κήτεσσι δομὴν ἀτάλαντοι ἰδέσθαι.
πολλοὶ δ' οὐτάμενοι, πρὶν ὑπὸ χθονὸς ἴχνος ἀεῖραι,
ὅσσον ἄνω προύτυψαν ἐς ἠέρα, τόσσον ἔραζε
βριθόμενοι πλαδαροῖσι καρήασιν ἠρήρειντο.
ἐρνεά που τοίως, Διὸς ἄσπετον ὀμβρήσαντος,
φυταλιῇ νεόθρεπτα κατημύουσιν ἔραζε,
κλασθέντα ῥίζηθεν, ἀλωήων πόνος ἀνδρῶν·
τὸν δὲ κατηφείη τε καὶ οὐλοὸν ἄλγος ἱκάνει
κλήρου σημαντῆρα φυτοτρόφον· ὣς τότ' ἄνακτος

Αἰήταο βαρεῖαι ὑπὸ φρένας ἦλθον ἀνίαι.
ἤϊε δ' ἐς πτολίεθρον ὑπότροπος ἄμμιγα Κόλχοις,
πορφύρων, ἦ κέ σφι θοώτερον ἀντιόωτο.
ἦμαρ ἔδυ, καὶ τῷ τετελεσμένος ἦεν ἄεθλος.

APOLLONIUS, RHOD., iii. 1386-1407.

III. Θηβαῖοι δὲ μετὰ ταῦτα ἐς θεὸν ἔπεμπον, βουλόμενοι τίσασθαι Ἀθηναίους. ἡ δὲ Πυθίη ἀπὸ σφέων μὲν αὐτῶν οὐκ ἔφη αὐτοῖσι εἶναι τίσιν, ἐς πολύφημον δὲ ἐξενείκαντας ἐκέλευε τῶν ἄγχιστα δέεσθαι. ἀπελθόντων ὦν τῶν θεοπρόπων ἐξέφερον τὸ χρηστήριον ἁλίην ποιησάμενοι· ὡς ἐπυνθάνοντο δὲ λεγόντων αὐτῶν τῶν ἄγχιστα δέεσθαι, εἶπαν οἱ Θηβαῖοι ἀκούσαντες τούτων· οὐκ ὧν ἄγχιστα ἡμέων οἰκέουσι Ταναγραῖοί τε καὶ Κορωναῖοι καὶ Θεσπιέες, καὶ οὗτοί γε ἅμα ἡμῖν αἰεὶ μαχόμενοι προθύμως συνδιαφέρουσι τὸν πόλεμον ; τί δέει τούτων γε δέεσθαι ; ἀλλὰ μᾶλλον μὴ οὐ τοῦτο ᾖ τὸ χρηστήριον. τοιαῦτα ἐπιλεγομένων εἶπε δή κοτε μαθών τις· Ἐγώ μοι δοκέω συνιέναι τὸ ἐθέλει λέγειν ἡμῖν τὸ μαντήϊον. Ἀσωποῦ λέγονται γενέσθαι θυγατέρες Θήβη τε καὶ Αἴγινα· τούτων ἀδελφεῶν ἐουσέων δοκέω ἡμῖν Αἰγινητέων δέεσθαι τὸν θεὸν χρῆσαι τιμωρητήρων γενέσθαι. καὶ οὐ γάρ τις ταύτης ἀμείνων γνώμη ἐδόκεε φαίνεσθαι, αὐτίκα πέμψαντες ἐδέοντο Αἰγινητέων, ἐπικαλεόμενοι κατὰ τὸ χρηστήριόν σφι βοηθέειν, ὡς ἐόντων ἀγχιστέων· οἱ δέ σφι αἰτέουσι ἐπικουρίην τοὺς Αἰακίδας συμπέμπειν ἔφασαν. πειρησαμένων δὲ τῶν Θηβαίων κατὰ τὴν συμμαχίην τῶν Αἰακιδέων καὶ τρηχέως περιεσθέντων ὑπὸ τῶν Ἀθηναίων αὖτις οἱ Θηβαῖοι πέμψαντες τοὺς μὲν Αἰακίδας σφι ἀπεδίδοσαν, τῶν δὲ ἀνδρῶν ἐδέοντο.

HERODOTUS, v. 79. 80.

IV. λαβόντες δὲ καὶ τἄλλα αἰσχρῶς οὑτωσὶ πάντα, πλέον ἢ τὰ ἡμίσεα τῶν χρημάτων μηδὲ καταλειφθῆναι κοινῇ πάντες ἀμφισβητοῦσιν, ὡς πεντεταλάντου δὲ μόνον τῆς οὐσίας οὔσης ἐκ τοσαύτης τοὺς λόγους ἀπενηνόχασιν, οὐ πρόσοδον μὲν ἐξ αὐτῶν οὐκ ἀποφαίνοντες, τὰ δὲ κεφάλαια φανερὰ ἀποδεικνύντες, ἀλλ' αὐτὰ τὰ ἀρχαῖ' οὕτως ἀναιδῶς ἀνηλῶσθαι φάσκοντες. καὶ οὐδ' αἰσχύνονται ταῦτα τολμῶντες. καίτοι τί ποτ' ἂν ἔπαθον ὑπ' αὐτῶν, εἰ πλείω χρόνον ἐπετροπεύθην ; οὐκ ἂν ἔχοιεν εἰπεῖν. ὅπου γὰρ δέκ' ἐτῶν διαγενομένων παρὰ μὲν τῶν οὕτω μικρὰ κεκόμισμαι, τῷ δὲ καὶ προσοφείλων ἐγγέγραμμαι, [πῶς οὐκ ἄξιον διαγανακτεῖν ;] δῆλον δὴ παντάπασιν· εἰ κατελείφθην μὲν ἐνιαύσιος, ἔᾳ ἔτη δὲ προσεπετροπεύθην ὑπ' αὐτῶν, οὐδ' ἂν τὰ μικρὰ ταῦτα παρ' αὐτῶν ἀπέλαβον. εἰ γὰρ ἐκεῖνα ἀνήλωται ὀρθῶς, οὐδὲν ἂν τῶν νῦν παραδοθέντων ἐξῆρκεσεν εἰς ἔκτον ἔτος, ἀλλ' ἢ παρ' αὐτῶν ἂν με ἔτρεφον ἢ τῷ λιμῷ περιεῖδον ἀπολόμενον. καίτοι πῶς οὐ δεινὸν εἰ ἕτεροι μὲν οἶκοι ταλαντιαῖοι καὶ δικάλαντοι καταλειφθέντες ἐκ τοῦ μισθωθῆναι διπλάσιοι καὶ τριπλάσιοι γεγόνασιν, ὥστε ἀξιοῦσθαι λητουργεῖν, ὁ δὲ ἐμὸς τριηραρχεῖν εἰθισμένος καὶ μεγάλας εἰσφορὰς εἰσφέρειν μηδὲ μικρὰς δυνήσεται διὰ τὰς τούτων ἀναισχυντίας ; τίνας δ' οὗτοι λελοίπασιν ὑπερβολὰς εἰπεῖν ; οἳ καὶ τὴν διαθήκην ἠφανίκασιν ὡς λήσοντες, καὶ τὰς μὲν, σφετέρας αὐτῶν οὐσίας ἐκ τῶν ἐπικαρπιῶν διῳκήκασι, καὶ τἀρχαῖα τῶν ὑπαρχόντων ἐκ τῶν ἐμῶν πολλῷ μείζω πεποιήκασι, τῆς δ' ἐμῆς οὐσίας, ὥσπερ τὰ μέγιστα ὑφ' ἡμῶν ἀδικηθέντες, ὅλον τὸ κεφάλαιον ἀνῃρήκασιν ;

DEMOSTH. *contra Aphobum*, i. 62-64.

ANCIENT PHILOSOPHY (Optional Subject):

Early Period.

Saturday, 6th April 1895.—9 *to* 11 *o'clock.*

1. τῶν δὴ πρώτων φιλοσοφησάντων οἱ πλεῖστοι τὰς ἐν ὕλης εἴδει μόνας ᾠήθησαν ἀρχὰς εἶναι πάντων.

Examine the accuracy of this description of Pre-Socratic thought.

2. Explain carefully the position of Zeno of Elea in the development of thought.

3. Give an account of the conditions, political and other, that led to the appearance of the Sophists.

4. Translate and explain :—

(*a*) διδόναι γὰρ αὐτὰ τίσιν καὶ δίκην ἀλλήλοις τῆς ἀδικίας κατὰ τὴν τοῦ χρόνου τάξιν.

(*b*) αὕη ψυχὴ σοφωτάτη καὶ ἀρίστη.

(*c*)
ἄκριτα φῦλα
οἷς τὸ πέλειν τε καὶ οὐκ εἶναι ταὐτὸν νενόμισται
κοὐ ταὐτόν, πάντων δὲ παλίντροπός ἐστι κέλευθος.

(*d*)
φύσις οὐδενός ἐστιν ἀπάντων
θνητῶν, οὐδέ τις οὐλομένου θανάτοιο τελευτή,
ἀλλὰ μόνον μίξίς τε διάλλαξίς τε μιγέντων
ἔστι· φύσις δ' ἐπὶ τοῖς ὀνομάζεται ἀνθρώποισιν.

(*e*) οὐ κεχώρισται τὰ ἐν τῷ ἑνὶ κόσμῳ οὐδὲ ἀποκέκοπται πελέκει.

(*f*) διαφέρειν γάρ φασι τὸ ὂν ῥυσμῷ καὶ διαθιγῇ καὶ τροπῇ μόνον.

(*g*) οὐδὲ κατηγορητέον ὡς ὁ μὲν κάμνων ἀμαθής. ὅτι τοιαῦτα δοξάζει, ὁ δὲ ὑγιαίνων σοφός. ὅτι ἀλλοῖα· μεταβλητέον δ' ἐπὶ θάτερα· ἀμείνων γὰρ ἡ ἑτέρα ἕξις.

Optional Subject: Aristotle.

Saturday, 6th April 1895.—9 *to* 11 *o'clock.*

1. To what extent does Aristotle use psychological results in the doctrine of the *Ethics*?

2. What account of αἴσθησις is given in the *De Anima*?

3. State Aristotle's definition of ἠθικὴ ἀρετή, and explain carefully the terms used.

4. Translate and explain :—

(*a*) πεπαιδευμένου γάρ ἐστιν ἐπὶ τοσοῦτον τἀκριβὲς ἐπιζητεῖν καθ' ἕκαστον γένος, ἐφ' ὅσον ἡ τοῦ πράγματος φύσις ἐπιδέχεται.

(*b*) καθόλου μὲν οὖν εἴρηται τί ἐστιν ἡ ψυχή· οὐσία γὰρ ἡ κατὰ τὸν λόγον. τοῦτο δὲ τὸ τί ἦν εἶναι τῷ τοιῳδὶ σώματι.

(*c*) καὶ γὰρ ἔστιν ἡ κίνησις ἐνέργειά τις, ἀτελὴς μέντοι.

(*d*) φαίνεται δ' ὅμως καὶ τῶν ἐκτὸς ἀγαθῶν προσδεομένη. καθάπερ εἰπομεν· ἀδύνατον γὰρ ἢ οὐ ῥᾴδιον τὰ καλὰ πράττειν ἀχορήγητον ὄντα.

(*e*) οὐ μνημονεύομεν δέ, ὅτι τοῦτο μὲν ἀπαθές, ὁ δὲ παθητικὸς νοῦς φθαρτός, καὶ ἄνε τούτου οὐθὲν νοεῖ.

(*f*) τῷ δὴ ζῶντι τοῦ πράττειν ἀφαιρουμένου, ἔτι δὲ μᾶλλον τοῦ ποιεῖν, τί λείπεται πλὴν θεωρία : ὥστε ἡ τοῦ θεοῦ ἐνέργεια, μακαριότητι διαφέρουσα, θεωρητικὴ ἂν εἴη.

B—MENTAL PHILOSOPHY.

LOGIC, PSYCHOLOGY, AND METAPHYSICS.

Monday, 1*st April* 1895.—9 *to* 12 *o'clock.*

FIRST PAPER.

1. What is the meaning of predication? Criticise from your point of view the theories of Hamilton, Bain, and Bradley.

2. "Our thought proceeds from the very beginning not from the particular to the universal, but, as was rightly observed by Aristotle, from the universal to the particular." Annotate.

3. "Induction is merely the inverse process of deduction." Is this a true statement of the relation between induction and deduction? Distinguish the question of the validity of inductive inference from that of its relation to deductive.

4. "The universality of laws in the real world is neither in itself a necessity of thought, nor can it be deduced as a necessary consequence from given facts." Discuss.

5. What is the value of non-contradiction as the test of truth? Compare it as regards (*a*) fruitfulness, (*b*) sufficiency with "the inconceivability of the opposite."

6. Discuss the relations to one another of Description and Explanation. Investigate in this reference the nature and aims of psychological analysis.

Monday, 1*st April* 1895.—2 *to* 5 *o'clock.*

SECOND PAPER.

1. Examine, historically and critically, the doctrines of (1) Obscure Ideas, (2) The Unconscious.

2. "The question regarding the origin of our knowledge leaves that regarding the conditions of its validity untouched." Distinguish the sphere of psychology from those of epistemology and metaphysics.

3. Analyse the psychological elements involved in the perception of an object as real or objectively existent.

4. Explain, with special reference to Locke, Hume, and Kant, the philosophical importance of the controversy as to mathematical truths.

5. Carefully consider Berkeley's account of the Self, both from the psychological and from the metaphysical point of view.

THIRD PAPER.

Tuesaay, 2nd April 1895.—9 *to* 12 *o'clock.*

1. Contrast Aristotle's treatment of his predecessors in *Metaph.* Book I. with that of Plato in the *Theaetetus.*

2. Give some account of Spinoza's theory of knowledge.

3. How do Kant's three *Critiques* stand related to one another, in his own conception of them, and in their influence upon subsequent thought? Can you trace any development between the first and third?

4. Annotate the following:—

"The only content which can be held to be the truth is one not mediated with something else, not limited by other things: or, otherwise expressed, it is one mediated by itself, where mediation and immediate reference-to-self coincide.

5. What are the main points in Lotze's criticism of Idealistic Monism and Herbartian Pluralism respectively? Estimate its value.

MORAL PHILOSOPHY.

Tuesday, 2nd April 1895.—2 *to* 5 *o'clock.*

FIRST PAPER.

1. "The teaching of reason to the individual must always be that the present time, and his own interests therein, are all-important to him." Examine this view of reason, and point out its historical affinities.

2. "Morality admits no discoveries." Investigate, with reference to this statement, the relations between ancient and modern ethics.

3. "The sense of duty is transitory, and will decrease as moralisation increases." Discuss the comparative values of the theories of Duty of Kant and Spencer.

4. "Free Will is a cause, the actual operation of which may falsify the most scientific forecasts of human action." How does the assumption of the Freedom of the Will affect the possibility of a Science of Human Conduct.

5. Critically examine the following:—"Goodness, as such, is but appearance which is transcended in the Absolute. But, since in that Absolute no appearance is lost, the good is a main and essential factor in the universe."

Wednesday, 3rd April 1895.—9 *to* 12 *o'clock.*

SECOND PAPER.

1. How far may "Dialectic" in Plato be regarded as a logical method? What is its relation to morality? Note any anticipations of the method by his predecessors.

2. What are the chief points of contrast between the Platonic and the Aristotelian conceptions of the moral nature of man?

3. What is the import for Spinoza's theory of his identification of Will and Understanding? Compare his doctrine in this regard with those of Hegel and Schopenhauer.

4. Examine Spencer's formula of Justice, and Sidgwick's objections to it as a universal principle. Criticise Spencer's theory regarding our warrant for the authority of the principle.

5. How far is Kant's ethical theory open to the charge of Formalism? What advance has Hegel made in this respect?

Wednesday, 3rd April 1895.—2 *to* 5 *o'clock.*

THIRD PAPER.

Write an Essay on any *one* of the following subjects :—

Property (from the ethical point of view);
The Function of Religion in Social Evolution ;
or,
The Relations of the Individual to the State.

C.—MATHEMATICS AND NATURAL PHILOSOPHY.

MATHEMATICS.

Monday, 1st April 1895.—9 *to* 12 *o'clock.*

1. Prove that

$$f(x)=f(0)+xf'(0)+\ \ldots\ +\frac{x^{n-1}}{(n-1)!}f^{n-1}(0)+\frac{x^n}{n!}f^n(\theta x).$$

where $0<\theta<1$, stating the necessary restrictions.

Shew that, when $f(x)=(1-x)^{-2}$, the theorem holds if $-\infty<x<1$; and that, as x tends to its limiting values, θ tends to 0 and 1 respectively. Shew also that, when $x=-1$, $\theta=\left\{(4n+4)/(2n+1)\right\}^{1/(n+2)}-1$.

2. Prove that a rational symmetric function of the roots of an equation can be rationally expressed in terms of the co-efficients.

If α, β ; α', β', be the roots of two quadratics, express

$$\left\{(\alpha-\alpha')(\beta-\beta')\right\}\left\{(\beta-\alpha')(\alpha-\beta')\right\}$$

and $\left\{(\alpha'-\alpha)(\beta'-\beta)\right\}^{1}\left\{(\beta'-\alpha)(\beta-\alpha')\right\}$,

in terms of the co-efficients.

3. The z-axis being vertical, shew by contour-lines the form of the surface $(x^2+y^2-2x)^2=(1-z^2)(x^2+y^2)$, and find the equation to the stream-lines.

4. Find the curvature at any point of $f(x,y)=0$, the axes being rectangular; and shew that, if $u+iv=\phi(x+iy)$, and $\mu^2=\dfrac{d(u,v)}{d(x,y)}$, the curvature of $u=$constant at any point is $\delta\mu/\delta u$.

5. Shew how to determine the asymptotes of an algebraic curve.

Prove that the asymptotes correspond on a reciprocal curve to the points of contact of tangents to the original curve from the origin of reciprocation; and find the nature of the infinite branches of the reciprocal corresponding to the curve passing through the origin, or having a tangent at a cusp or point of inflexion which passes through the origin.

6. A straight line always meets a plane curve and two other straight lines parallel to the plane of the curve and perpendicular to one another. Shew that the trace of the line on any plane parallel to the first plane is derivable from the original curve by a homogeneous strain.

Shew how to determine the trace when the planes and lines have any relative positions whatever.

7. Shew that, if two conics are inscribed in and circumscribed about a triangle, an infinite number of triangles can be drawn with sides touching the one and vertices on the other. With any co-ordinates you please, express the co-ordinates of a vertex in terms of the co-ordinates of the point of contact of the opposite side.

8. If (x, y, z) are trilinear co-ordinates, and (λ, μ, ν) the line co-ordinates of the line $\Sigma\lambda x=0$, find the line co-ordinates of the common tangents of $Ax^2+By^2+Cz^2=0$, and $A\lambda^2+B\mu^2+C\nu^2=0$.

Find also the condition that the two curves (1) touch, (2) intersect in real points.

9. Shew that the integral $\int dx f(x, \sqrt{(ax^2+bx+c)})$, where f is a rational function, can be rationalised in an infinity of ways.

What is the conclusion regarding the reduction of the integral, and what is the general result of which the present is merely a particular case?

Integrate $1/x^2(x^2-a^2)^{\frac{1}{2}}$, $1/(1+\cosh x)$, and $1/(1+x^n)$, n being a positive integer.

10. State the necessary and sufficient conditions for the applicability of the formulae for integrating by parts and for differentiating a definite integral; and demonstrate in the latter case.

Evaluate $\int_0^\infty dx \sin x/x$, and $\int_0^\infty dx \sin ax \sin bx \sin cx/x^2$, where a, b, c are positive quantities proportional to the sides of a triangle.

Draw the curve $x^5+y^5-5a^2x^2y=0$; and find the area of a loop.

11. Express the relation $y=(ax+b)/(cx+d)$ in the form $(y-\alpha)(y-\beta)=Q(x-\alpha)/(x-\beta)$: and shew that, if the variables are transformed by the linear substitution $x'=(Ax+B)/(Cx+D)$, $y'=(Ay+B)/(Cy+D)$, the function $(bc-ad)/(a+d)^2$ is in general an absolute invariant. Discuss the exceptional case.

12. Using the ratios $(l : m : n : \lambda : \mu : \nu)$, where $l\lambda + m\mu + n\nu = 0$, as co-ordinates of the line $\lambda = ny - mz$, $\mu = lz - nx$, $\nu = mx - ly$, prove that the co-ordinates of its polar line with respect to $\Sigma x^2/a^2 - 1 = 0$ are $(a^2\lambda : b^2\mu : c^2\nu : -b^2c^2l : -c^2a^2m : -a^2b^2n)$. Also find the condition that the line touch the ellipsoid.

Monday, 1st April 1895.—2 *to* 5 *o'clock.*

1. Prove the infinite product formulae for $\sin x$.

Sum the series

$$\frac{1}{\theta^2} + \frac{1}{(2\pi-\theta)^2} + \frac{1}{(2\pi+\theta)^2} + \frac{1}{(4\pi-\theta)^2} + \frac{1}{(4\pi+\theta)^2} + \ \ldots \ . \ ad\ \infty.$$

2. Discuss the conditions for turning values of $f(x, y)$; and point out the connection between your results and the theory of Dupin's Indicatrix.

Find the turning values of $\Sigma x^4 - \Sigma x^2y^2$ subject to the condition $x^2 + y^2 + z^2 = 1$.

3. Prove that the discriminant of a conic is an invariant.

Find the locus of the centres of all the rectangular hyperbolae which touch a conic at one fixed and one variable point.

4. Shew that there are ∞^6 tetrahedra which are self-conjugate with respect to a given quadric, and one tetrahedron which is self-conjugate with respect to two given quadrics.

Shew that the projection on any face F of the common self-conjugate tetrahedron from the corresponding vertex of the curve of intersection of two quadrics is a conic C, which has a self-conjugate triangle in common with the conics D and E in which the two quadrics meet F: and that, if the centres of D and E be fixed and the tetrahedron fixed, the locus of the centre of C is a conic circumscribing the common self-conjugate triangle of D and E.

5. Shew that the equation to the tangent cone to the quadric $\Sigma x^2/a^2 - 1 = 0$, referred to its principal axis is $\Sigma x^2/\lambda_1 = 0$, where λ_1, λ_2, λ_3 are the parameters of the three confocals through its vertex.

Find the locus of all normals parallel to a given direction to a system of confocal quadrics.

6. Shew how the asymptotic cone of a quadric can be used to distinguish the nature of the section by a given plane.

Deduce the condition for a parabolic section; and shew that the latus rectum of a parabolic section of a paraboloid of revolution depends only on the distance of its plane from the origin.

7. Investigate equations for the directions of the lines of curvature and for the principal radii of curvature at any point of the surface $z = f(x, y)$.

The centre of a quadric is fixed and it touches a fixed plane, shew that the product of the principal radii of curvature at the point of contact is constant.

8. Shew that, when n is large,

$$\Gamma(n+1)=e^{-n}n^n\{\sqrt{(2n\pi)}+\theta\},$$

where θ is a quantity having a finite upper limit.

Find the value of $\underset{n=\infty}{Lt}\, n^{\frac{1}{2}}\int_0^1 dx\, x^n/\sqrt{(1-x^2)}$; and shew that

$$\underset{n=\infty}{L}\frac{2^2 4^2 \ldots (2n)^2}{1^2 3^2 \ldots (2n-1)^2}\cdot\frac{1}{2n+1}=\frac{\pi}{2}.$$

9. Establish Jacobi's theorem regarding the transformation of a double integral.

Find an integral representing the area of the paraboloid $x^2/a^2-y^2/b^2=z/c$ contained between the two generators at the vertex and any other two generators, the integrating variables being the parameters belonging to two generators of opposite systems. Discuss the possibility of evaluation by means of elementary transcendents in the particular case where $a=b=\sqrt{2c}$.

10. If $f(z)$ be synectic within any simply connected contour c, shew that $\int dz f(z)/(z-x)$ taken in the positive sense round the boundary of c is equal to $2\pi i f(x)$, x being any point within the contour.

Find the value of $\int dz/\sqrt{z}(z-1)$ taken round any contour including the points 0 and 1.

Shew, by integrating round a properly chosen contour, that

$$\int_{-\infty}^{\infty} dx e^{-x^2}\cos 2bx=\sqrt{\pi}e^{-b^2}.$$

11. Discuss the conditions for a singular solution of an ordinary differential equation of the first order whose primitive is given without restriction.

Solve and otherwise discuss

(i) $xp-y=x^2+y^2$;

(ii) $p^2+2x^3p-4x^2y=0$.

12. Investigate the condition that the linear equation

$X_n y^{(n)}+X_{n-1}y^{(n-1)}+\ldots+X_0 y=X$ be exact.

Solve

(i) $$x\frac{d^3y}{dx^2}-x\frac{d^2y}{dx^2}-\frac{dy}{dx}=0;$$

(ii) $$\begin{cases}\dfrac{d^2x}{dt^2}-\dfrac{dx}{dt}+x-y=e^{2t},\\ 3\dfrac{dx}{dt}-\dfrac{dy}{dt}+3x-y=e^t.\end{cases}$$

13. Give Jacobi's theory of the linear homogeneous partial differential equation.

Integrate

(i) $\{y^2+z^2+x(y+z)\}p-\{z^2+x^2+y(z+x)\}q=x^2-y^2+z(x-y)$;

(ii) $(px+qy-z)^2(x^2+y^2)=p^2+q^2$;

and find the integral surface of (i) which touches $x^2+y^2+z^2=a^2$.

14. Given a partial differential equation of the first order which has an ordinary Lagrangian singular solution, shew how to derive from it another which has a singular solution involving an arbitrary constant. Illustrate by means of (13) (ii) above.

Find the integral surface of $\frac{\delta^2 z}{\delta x^2}+\frac{\delta^2 z}{\delta y^2}=ex+y$, which meets the plane of zx at right angles in the curve $z=\cosh x$.

Tuesday, 2nd April 1895.—9 *to* 12 *o'clock.*

(*Write Dissertations on not more than* TWO *of the following subjects.*)

1. Geometry of n Dimensions, with special application to the theory of Multiple Integrals.

2. The Reduction of Hyperelliptic, and specially of Elliptic Integrals to Normal Forms.

3. Taylor's Theorem and allied theorems for functions of a complex variable.

4. The possible positions of a straight line in space of three dimensions, when one or more equations among its co-ordinates are given.

5. The reduction of a system of simultaneous Linear Homogeneous Ordinary Differential Equations, with constant co-efficients to equations, each containing only one dependent variable, by means of linear homogeneous transformations of the dependent variables.

6. A proof that the Discriminant of any quadric function whatever is an Invariant. By means of this Invariant, and of the invariant expression for the distance between two points, find all the ordinary invariants of the quadric surface, and their particular forms for orthogonal substitutions.

NATURAL PHILOSOPHY.

Tuesday, 2nd April 1895.—2 *to* 5 *o'clock.*

FIRST PAPER.

1. Give the details of the path of a point when the acceleration is constant in direction and proportional to the square of the rate of change of direction of motion.

2. Shew that the Time and Action for any arc of a planet's orbit are proportional to the areas described about the foci respectively.

3. Find the equipotentials and the current lines in an infinite uniform plate when two opposite corners of a square are maintained at a definite potential and the other corners are put to earth.

4. A uniform chain hangs across a rough horizontal cylinder. Find its position when it is just about to slip ; and shew how this depends upon the coefficient of friction, and upon the ratio of the length of the chain to the radius of the cylinder.

5. Find the form of the stream lines when a sphere, under no forces, moves in an infinite liquid.

6. Find the path of a sphere through a uniform cloud of little particles moving at the same speed in parallel directions, the velocity of the sphere being initially at right angles to their motion.

7. Find the distribution on an insulated sphere with zero charge in a uniform field of electric force. Shew how to pass to the case of a non-insulated sphere in the same field.

8. Give Green's Theorem, pointing out clearly the relations among the various surface and volume integrals, and the condition that it is applicable to infinite space.

Apply it to prove that the potential energy of one charged conductor in the field due to another is equal to the potential energy of the second in the field due to the first.

9. Find the general expression for the intensity of light at any point of a screen after it has been diffracted by passing through an aperture in a screen parallel to the wave-front. Integrate the expression for a square aperture, and shew how to find the positions of maximum and minimum intensities for homogeneous light.

10. Calculate the attraction of a uniform hemisphere upon a particle on its rim. Hence calculate the deflection produced on a plumb line in the neighbourhood of a hill approximately hemispherical, which is half a mile high and has a density half that of the mean density of the earth.

11. One end of an infinitely long bar is subjected to a periodic variation of temperature. Find the distribution of temperature at any time along the bar ; and shew how to calculate the conductivity in terms of easily measured quantities.

12. Find an expression for the mutual potential energy of two small magnets of given magnetic moments. When the axis of one is fixed, calculate the couple and force acting on the other in any assumed position, and find the position of stable equilibrium for rotational motion.

Wednesday, 3rd April 1895.—9 *to* 12 *o'clock.*

SECOND PAPER.

1. An excentrically loaded circular cylinder rolls on a rough horizontal plane. Find how the pressure on the plane varies. Under what conditions does it vanish?

2. Find the brachistochrone between any two points, when the speed is as the distance from (*a*) a given plane, (*b*) a given straight line.

3. Given the angular velocity of each element in an infinite mass of liquid, shew how to find the motion completely.

4. Find how the specific heat at constant volume, in a fluid, changes with the volume. Find the numerical result for ether where, approximately,

$$\frac{v_o - v}{pv_o} = \frac{0{\cdot}291 + 0{\cdot}0007t}{2420 - 14t + p}$$

t being temperature C.

5. A spherical portion of an infinite isotropic homogeneous solid is instantaneously raised to a temperature v', the rest being at v_o. Find the distribution of temperature at any future time.

6. An elastic but slightly extensible string is attached by its ends to two points at the same height. Calculate the tenacity of the string which will just permit the terminal points to be distant from one another by the unstretched length of the string.

7. In a circuit of Ohmic resistance R and self-inductance L a harmonic electromotive force $E \sin pt$ acts. Shew that the resistance is apparently increased by an amount depending on L and p. Investigate also the effect of a neighbouring closed circuit of resistance S and self-inductance N.

8. Shew how to form Euler's equations expressing the couples about the principal axes of a body in terms of the angular velocities about these axes.

A body which is symmetrical about one axis is acted upon by a resisting couple whose axis is parallel to the instantaneous axis of rotation and whose amount is proportional to the total angular velocity. Find how the instantaneous axis moves in the body, discriminating between the two cases in which the axis of symmetry is the axis (1) of maximum, (2) of minimum moment of inertia.

9. Find the equations of the adiabatic lines which give the relation between pressure and volume in a gas obeying Boyle's Law. Thence find the adiabatic compressibility of a gas; and give reasons, based upon considerations of the dissipation of energy, for the conclusion that this is the compressibility which determines the velocity of sound-waves in the air.

20. Investigate the equipotential surfaces and lines of force due to a finite straight wire every particle of which attracts according to the law of the inverse square of the distance.

11. Two equal particles, which can slide along a smooth rod of given length and of mass equal to the mass of each particle, are set in close contact with each other and with the centre of the rod. The rod is then started with a given angular velocity about its centre. Discuss the subsequent motion of the system, the particles rebounding from the ends of the rod (1) without loss of energy, (2) with loss of energy.

12. A condenser of known capacity (C) is charged, and then discharged through a coil of wire of given resistance (R) and self-inductance (L). Discuss the conditions for an oscillatory and for a non-oscillatory discharge.

Wednesday, 3rd April 1895.—2 *to* 5 *o'clock.*

THIRD PAPER.

1. A disc moves in a plane, and the plane being taken as fixed, the forces on it appear to be equivalent to X, Y along perpendicular lines through the centre of mass and a couple L. If the plane is rotating in any manner in its own plane about a fixed point, find what the forces really are.

2. A pendulum consists of a thin rod of length $2a$ and a sphere of radius $a\sqrt{10/3}$. Determine the position of the sphere on the rod for which the period is independent of the ratio of the masses, and shew that either raising or lowering the sphere will increase the period.

3. A solid formed by the revolution of the cardioid $r = 1 + \cos\theta$ about the line $\theta = 0$ floats in water in stable equilibrium, the cusp (O) being in the surface. If G be its centre of mass, H the centre of buoyancy, and M the metacentre, shew that $OG = 0{\cdot}8$, $OH = 0{\cdot}86$, $OM = 0{\cdot}76$, and that the specific gravity of the solid is $0{\cdot}9375$.

4. A rod AB has a particle C fastened to B by a light string. Initially ABC is a straight line, and the string is taut; and C is projected perpendicular to AB. Determine the condition that at some moment the system moves as if rigid, and find the configuration and motion at the moment.

5. The centre of a circular disc traces out a closed curve consisting of part of the y-axis, a curve C which meets no ordinate twice, a parallel to the y-axis, and part of the x-axis. The disc rolls on a straight line parallel to the x-axis, which may move in a direction perpendicular to itself. Find the area traced by a point P of the disc, and shew that by giving the disc an appropriate radius and making P begin on the x-axis or the y-axis, any term of the Fourier expansion of the curve C may be found.

6. Find the tension at any point of the common catenary in terms of the length of the string and the distance between the points of support supposed at an equal height.

Four smooth pegs are in the same horizontal line at equal distances, and a uniform string is fixed to the outer pegs and passes over the inner. Is the configuration in which it hangs in three equal catenaries stable?

7. A particle is drawn up from the bottom to the edge of a hemi-elliptical bowl, the least force that can move it acting at each moment. Find the work done and its maximum and minimum values for different degrees of roughness.

8. A uniform straight tube contains a particle of mass equal to its

own. The particle is placed at the middle point of the tube, which is set rotating about this point on a smooth horizontal plane. Find the velocity relative to the tube with which the particle leaves it.

9. Two particles, each of mass m, at distance a, are projected perpendicular to the line adjoining them and to one another's direction of motion with the same speed $\sqrt{m\gamma}$ $2a$, where γ is the attraction between unit masses at unit distance. Determine their paths, the earth's gravitation not being supposed to act.

10. A semi-circular wire lies on a rough horizontal plane. A string is tied to the middle point and pulled till the wire just moves. If it turn about an extremity, find the direction and magnitude of the pull.

11. Find the capacity of an air condenser whose surfaces are concentric spheres. If the space between the spheres on one side of a diametral plane be filled with a dielectric of specific inductive capacity k, shew that the capacity is the same as if the whole space were filled with a dielectric of specific inductive capacity $(1+k)/2$.

12. Define an equipotential surface, and shew how, when the equipotential surfaces are known, the force at every point of the field may be determined.

The potential is given at four points near each other; give an approximate construction for the direction of the field in their neighbourhood.

D.—ENGLISH (LANGUAGE, LITERATURE, AND BRITISH HISTORY).

ENGLISH.

Friday, 29th March 1895.—9 *to* 12 *o'clock.*

FIRST PAPER.

1. Discuss Aristotle's definition of Tragedy in the *Poetics*, and his views as to the requisites and limitations of Tragic Action.

Or,

Summarise Aristotle's views as to the nature of Epic Poetry, and its contrasts with History.

2. Explain the general doctrine of Bacon's *Advancement of Learning*, Book II.

Or,

Sketch the History of the theory of the Dramatic Unities, with reference to English Literature.

3. Write a brief history of Blank Verse, as an English metrical form, noting phases of importance.

Or,

Trace the history of the English Heroic Couplet.

4. Compare the author of *Piers Plowman*, Spenser, and Bunyan, as allegorical writers.

5. Explain the literary doctrine of *Euphues and his England*, and state to what extent you recognise its influence throughout the seventeenth century.

6. Give some account of the influence of the French Revolution upon English Poetry, in respect to themes and treatment.

Friday, 29th March 1895.—2 *to* 5 *o'clock.*

SECOND PAPER.

Write an Essay upon *one* of the following subjects :—

Ideals of Excellence in Prose and Poetry respectively.
The Sentimental Re-action in the Eighteenth Century.
Present-Day Tendencies in English Verse.

Saturday, 30th March 1895.—9 *to* 12 *o'clock.*

THIRD PAPER.

1. What was the occasion of the writing of the *Essay of Dramatic Poesy?*

Indicate the chief points treated of in the Dialogue, and give the substance of 'Neander's' characterisation of Ben Jonson and of Shakespeare.

2. Discuss, with special reference to the prescribed books, Pope's literary theory.

3. Write an appreciation of Swift, with allusion to the powers shown in *A Tale of a Tub* and *Gulliver's Travels*, and consider how far he may be said to be anti-classical.

4. What are the characteristics of Johnson's critical method, and what new elements do you recognise in it?

5. Examine the phases of re-action in Gray's verse.

Or,

Contrast Thomson's *Seasons* with Cowper's *Task* in respect of their Naturalism.

6. How far is Burns indebted to Allan Ramsay and Fergusson with regard to themes and forms?

Saturday, 30th March 1895.—2 *to* 5 *o'clock.*

FOURTH PAPER.

1. Explain clearly what you understand by the Classicism of the Eighteenth Century.

2. Estimate the influence of French Literature upon English Literature during the earlier decades of the Eighteenth Century.

3. Discuss the influence of Society, and of the popularisation of literature, upon literary art during the earlier half of the Eighteenth Century.

4. Summarise the critical work of—
(*a*) Addison,
Or,
(*b*) Rymer, Sprat, and Dennis.

5. Trace the stages of the rising appreciation in the Eighteenth Century of Spenser, Shakespeare, and Milton.

6. Give some account of the Drama during your special period.
Or,
Define the historical position of (*a*) Horace Walpole, (*b*) Laurence Sterne, in English Literature.

Monday, 1st April 1895.—9 *to* 12 *o'clock.*

FIFTH PAPER.

1. (*a*) Give some account of the more important hypotheses concerning the composition and date of *Beowulf*. Indicate which you consider most plausible.

(*b*) Translate and annotate :—

"Beowulf maðelode, bearn Ecgþeowes :
'Geþenc nu, se mæra maga Healfdenes,
'snottra fengel, nu ic eom siðes fus,
'goldwine gumena, hwæt wit geo spræcon,
'gif ic æt þearfe þinre scolde
'aldre linnan, þæt ðu me a wære
'forðgewitenum on fæder stæle !
'Wes þu mundbora minum magoþegnum,
'hondgesellum, gif mec hild nime !
'swylce þu ða madmas, þe þu me sealdest,
'Hroðgar leofa, Higelace onsend !"

2. Translate the following extract from the *Saxon Chronicle*, and note any linguistic peculiarities :—

"964. Her dræfde Eadgar cyng þa preostas on Ceastre of Ealdan mynstre, ⁊ of Niwan mynstre. ⁊ of Ceortes ige. ⁊ of Middel tune. ⁊ sette hy mid munecan. ⁊ he sette Æþelgar abbod to Niwan mynstre to abbode. ⁊ Ordbirht to Ceortes ige. ⁊ Cyneweard to Middel tune.

971. Her forðferde Eadmund æðeling. ⁊ his lic lið æt Rumesige.

973. Her Eadgar wæs, Engla waldend,
corðre micelre, to cyninge gehalgod.
on ðære ealdan byrig, Acemannes ceastre.
eac hi ig buend oðre worde beornas
Baðan nemnaþ. Þær wæs blis micel,
on þam eadgan dæge. eallum geworden,
Þonne niða bearn. nemnað ⁊ cigað
Pentecostenes dæg."

3. Shew the linguistic importance of the Ruthwell Runes, and write some short notes on the following extract from the *Dream of the Rood*, (*a*) being from Ruthwell and (*b*) from the Vercelli Text.

(*a*) "(ahof) ic riicnæ kyningc
heafunæs hlafard
hælda ic (n)i darstæ
bismæradu ungcet men ba æt gad(r)e."

(*b*) "Ahof ic ricne cyning,
heofona hlaford;
hyldan me ne dorste.
Bysmeredon hie unc butu ætgædere."

4. Translate and remark on peculiarities of dialect in the following:—

(*a*) "'Ich an wel,' cwaþ þe nigtegale;
'Ah, wranne, nawt for þire tale,
Ah do for mire lahfulness:
Ich nolde þat un-rihtfulnesse
Me at þen ende over-kome;
Ich nam of-drad of none dome.
Bi-hote ich habbe, soþ hit is,
Þat maister Nichole, þot is wis,
Bi-twixen us deme schulde;'"

(*b*) "Listens now, and leues me,
Who-so lifes, þai sall se
Þat it mun be ful dere boght
Þat þir galay men haue wroght.
Þai houed still opon þe flode,
And reued pouer men þaire gude;
Þai robbed and did mekill schame,
And ay bare Inglis men þe blame."

5. Describe the origin of Layamon's *Brut*, and translate, with notes, the following:—

"Þa answerede þe oðer:
þat wæs þe aldeste broðer.
Lust me nu lauerd king:
& ich þe wullen cuðen
what cnihtes we beoð:
& whanene we icumen seoð.
Ich hatte Henges[t]:
Hors is mi broðer.
we beoð of Alemai*n*ne:
aðelest alre londe.
of þat ilken ænde:
þe Angles is ihaten."

Monday, 1*st April* 1895.—2 *to* 5 *o'clock.*

SIXTH PAPER.

1. Give some account of the dialects of Middle English, connecting them with those of before the Conquest, and discuss in this connection the suitability of the terms employed in saying that "*slept*" and "*eleven*" are "derived" from Anglo-Saxon "*sleptun*" and "*enlefan.*"

2. Sketch the influence of French upon Middle English. Justify your preference for the term Anglo-French.

3. Give some account of the linguistic influences on literary Middle Scots, of (*a*) Chaucer, (*b*) the Classical Revival, (*c*) French. Discuss, in regard to the last, the arguments of Francisque-Michel.

4. Explain the differences between Old and Middle English Syntax and account for the modifications as far as possible.

5. Identify the dialect of the following passages, giving your reasons, and translate (*a*) and (*e*) :—

(*a*) "Þus com, lo ! Engelond · in-to Normandies hond.
& þe Normans ne couþe speke þo · bote hor owe speche,
& speke French as hii dude atom · & hor children dude also teche.
So þat heiemen of þis lond · þat of hor blod come,
Holdeþ alle þulke speche · þat hii of hom nome.
Vor bote a man conne Frenss · me telþ of him lute ;
Ac lowe men holdeþ to Engliss · and to hor owe speche ȝute.
Ich wene *þer* ne beþ in al þe world · contreyes none,
Þat ne holdeþ to hor owe speche · bote Engelond one."

(*b*) "'My gast,' he says, 'sal noght ay dwelle
In man, for he es flesshe and felle ;
Hys days sal be for to life here
An hundreth and twentie yhere.'
Bot swa grete elde may nane now bere,
For sythen mans lyfe bycom shortere,
For-whi þe co*m*plection of ilk man
Was sythen febler þan it was þan."

(*c*) "Þe kyng and his knihtes · to þe Churche wenten
To heere Matyns and Masse · and to þe Mete aftur.
Þe*n*ne Wakede I of my wink · me was wo w*i*th alle
Þat I nedde sadloker I-slept · and I-se*ȝ*e more."

(*d*) "Swa hapnyt it that, on a day,
He vent till hwnt, for till assay
Quhat ga*m*myn wes in that cuntre ;
And sa hapnyt th*a*t day that he
By a vode-syde to sett is gane,
Vith his twa hund*i*s hym allane."

(*e*) "Sondere men he it leiden on,
And senten it iacob i*n*-to ebron,

And shewed it hi*m*, and boden hi*m* sen
If his childes wede it migte ben ;
Senten him bode he funden it.
ðo iacob sag dat sori writ,
He gret, and seide ðat ' wilde der
Hauen min sune swolgen her.' "

SEVENTH PAPER.

BRITISH HISTORY.

Tuesday, 2nd April 1895.—9 *to* 12 *o'clock.*

(N.B.—*Not more than* NINE *questions to be attempted. The questions should be taken from different parts of the paper.*)

1. Describe, briefly, the political organisation of the Early English Settlers in Britain.

2. State the main events which contributed to the unification of the English State.

3. Write a paragraph on the influence on contemporary English history of Alfred, or Dunstan, or Godwine.

4. Describe the measures adopted by William the Conqueror to consolidate the conquest of England.

5. Give a short account of the administrative system of Henry II.

6. Sketch, briefly, the struggle for Constitutional Reform maintained by Simon de Montfort.

7. State the origin of the Scottish War of Liberation, and discuss the claims of Edward I. to the overlordship of Scotland.

8. Sketch the decisive events of the Hundred Years' War.

9. Compare the political and social conditions of England and Scotland during the fifteenth century.

10. Give a short account of the foreign policy of Elizabeth, or Cromwell, and its effects on the balance of power.

11. Give an outline of the relations between Scotland and England, and Scotland and France, in the sixteenth century.

12. Indicate generally the character, and the effects on English and Scottish history, of Stuart Absolutism.

13. Explain the nature of the Revolution of 1688, as illustrated by the proceedings of the Convention of 1689.

14. Give a general view of British foreign policy in the reigns of Anne and George II.

15. Discuss the attitude of leading British Statesmen towards the French Revolution.

16. Give a short account of British Colonial expansion in the eighteenth century.

17. Discuss the share taken by Great Britain in the overthrow of Napoleon.

18. Describe the aims and character of the chief reforms passed by Parliament, during the period 1832-66.

EIGHTH PAPER.

SPECIAL PERIOD OF BRITISH HISTORY.

(WYCLIFFE AND HIS INFLUENCE.)

Tuesday, 2nd April 1895.—2 *to* 5 *o'clock.*

A.

(FIVE *questions only to be answered.*)

1. "Civil and religious liberty begin to revive early in the twelfth century." Explain and discuss.

2. State shortly the doctrines of Dante, Marsiglio, Grossteste, and Ockham respectively, with special reference to State and Church.

3. Sketch Wycliffe's career.

4. *Either* (*a*) describe briefly the position of the Church in England in Wycliffe's time; *or*, (*b*) Sketch the political history of the period 1375-1414.

5. Sum up the chief doctrines of Wycliffe regarding (*a*) Church and (*b*) State.

6. Trace in outline the influence of Wycliffe on English religious thought down to the Reformation.

7. What do you know of John Hus, Jerome of Prague, and Peter Payne respectively?

8. Explain—(*a*) "Accidentia sine subjecto"; (*b*) "Identificatio et impanatio"; (*c*) "Infinita sanctorum supererogata merita"; (*d*) "Licet fratribus distribuere merita propria."

B.

(THREE *passages only to be translated and discussed.*)

1. Tha cusen hi an clerc and brohten him to foren se kyng, and se kyng him geaf thone ærcebiscoprice. . . . Tha com (to Rome) se ærcebiscop and wæs thære full seoueniht ær he mihte cumen to thes papes spræce; . . . forthan thæt he hæfde underfangen thone ærcebiscoprice togeanes tha muneces of the mynstre and togeanes rihte.

2. Si archiepiscopus defecerit in justitia exhibenda ad dominum regem perveniendum est postremo, ut precepto ipsius in curia archiepiscopi controversia terminetur, ita quod non debet ulterius procedere absque assensu domini regis.

3. Si tu sachez de lettrure, et estes coroucé,
Devaunt les justices serrez appelée;
Uncore poez estre à prisone retornée,
En garde de le evesque, jesque seiez purgée.

4. And so bileeue I lelly · (vr lord forbeode hit elles!)
That pardoun and penance · and prayers don sauen
Soules that han sunget · seuen sithes dedlich.
Bote trustene to Trienals · treuly me thinketh
Is not so syker for the soule · certes as do wel.

5. Omnes clerici debent pure vivere de decimis oblacionibus et privatis elemosinis, sic quod omnia civilia dominia in regno debent esse in manibus secularium dominorum. . . . Nec valent ficciones quibus dicitur quod non forent clerici sufficientes nisi in temporalibus sint dotati.

Bursaries, Prizes, Scholarships, and Fellowships in Arts.

—o—

I.—BURSARIES.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	16—	George Heriot.	At present £480 0 0	16	3	£30 0 0	Governors of George Heriot's Trust.
		Do. Bursaries for Girls.	630 0 0	21	3	30 0 0	Do.
		Do. High School Univer. Bursaries.	270 0 0	9	3	30 0 0	Do.
II.	1619	Archibald Johnston, Merchant in Edin.	11 2 2	1	4	11 2 2	Earl of Haddington.
III.	1622 1764 1766	John Trotter of Mortonhall, and Rev. J. Penman of Bothkennar.	9 18 1	1	4	9 18 1	Trotter of Mortonhall and Gilmour of Craigmillar, alternately.
IV.	1626 1629 1640 1726	Hugh Wight, David M'Call, and David Christie.	13 1 1	1	4	13 1 1	Town Council.
V.	1639	Dr Robt. Johnstone of London.	25 0 0	2	4	12 10 0	Johnstone of Annandale.
VI.	1639	Do. do.	25 0 0	2	4	12 10 0	Town Council.
VII.	1642 1653 1696	Weir, Jenkins, Hepburn, and Lightbody.	11 7 9	1	4	11 7 9	Town Council, 1st and 2nd Presentations, and Campbell of Aberuchill, 3rd Presentation.
VIII.	1644 1673	Jas. Dalgliesh. and Jn. M'Morran.	13 7 8	1	4	13 17 8	Town Council.
IX.	1678	John Penman, Bailie and Merchant, Edinburgh.	14 15 0	1	4	14 15 0	Society for the Benefit of the Sons of the Clergy.
X.	1678	Hector Ford of Branxton.	33 6 6	3	4	11 2 2	Town Council.
XI.	1687	Sir Andrew Ramsay of Abbotshall.	11 2 2	1	4	11 2 2	Do. and Ministers of Edinburgh.
XII.	1698	Ad. Chrystie, Under Clerk of Session.	18 0 0	1	4	18 0 0	Faculty of Advocates.
XIII.	1702	Thos. Bryson, Bailie and Merchant in Dunbar.	10 0 0	2	4	5 0 0	Ministers of the Presbytery of Dunbar.
XIV.	1703 1725	Pringle and Wardrop.	11 18 10	1	4	11 18 10	Pringle of Torwoodlee and J. C. Wardrop, W.S., alternately.
XV.	1714	Rev. Robert Brown, of Protestant Consistory at Zamose.	25 0 0	2	4	15 0 0 10 0 0	Town Council.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
XVI.	1723	Alexander Mitchell and James Shortt.	£17 6 8	1	4	£17 6 8	Livingston Learmonth of Parkhall and his heirs; Earl of Morton and his heirs.
XVII.	1734	Laurence Dundas, Professor of Humanity in the University of Edin.	About 44 0 0	2	4	About 22 0 0	Jas. Dundas of Dundas, Robt. Dundas of Arniston, and Dundas of Carrenhall, by turns.
XVIII.	1768	Thos. Fraser, Clerk in the office of City Clerk, Edinburgh.	36 0 0	2	7	18 0 0	The Provost, Dean of Guild, and Treasurer of Edin.
XIX.	1784	William Hume, Eastbarns, Dunbar.	16 0 0	2	4	8 0 0	Ministers of the Presbytery of Dunbar.
XX.	1784	Rev. Jas. Millar and Spouse.	24 0 0	1	4	24 0 0	Kirk-Session of Kippen.
XXI.	1809	Dr Donald Grant, London.	About 180 0 0	4	4	About 45 0 0	Earl of Seafield, and James Mackenzie, W.S., as Dr Grant's Trus.; whom failing, Sen. Acad.
XXII.	1810	Rev. James Stuart.	30 0 0	2	3	15 0 0	Senatus Academicus
XXIII.	1837	James Menzies.	200 0 0	4	4	45 0 0	Sir R. Menzies, Bart. & Ministers of Dull Weem, & Fortingall
XXIV.	1837	Peter Dow, Esq. of Balmyle.	20 0 0	2	4	10 0 0	P. S. Keir, Esq of Kindrogan, J Small, Esq. of Dirnanean, and W. A Keir, Esq., Yr. o Kindrogan.
XXV.	1838	Robert Blair, D.D., Barton St Andrews, Norfolk.	10 0 0	1	3	10 0 0	Principal, and Profs of Latin, Greek, Mathematics, Logic & Metaphysics, and Moral Philosophy.
XXVI.	1846	John Jamieson, Esq., Edinburgh.	About 26 0 0	1	4	About 26 0 0	Principal, & two Profs of the University.
XXVII.	1846	G. P. Bidder, C.E.	43 12 0	1	4	43 12 0	Senatus Academicus
XXVIII.	1852	Wm. Lennie, Esq.	48 0 0	4	4	12 0 0	Town Council.
XXIX.	1853	John Bruce, Esq., Trinity Crescent, Edinburgh.	160 0 0	1 4	4 4	40 0 0 30 0 0	Do.
XXX.	1858	M'Diarmid Trustees.	10 0 0	1	3	10 0 0	Senatus Academicus
XXXI.	1860	Wm. Patrick, Esq., of Roughwood.	About 120 0 0	3	4	About 40 0 0	Principal and Professors in Arts.
XXXII.	1858	Edin. Ayrshire Club.	50 0 0	2	2	25 0 0	Edin. Ayrshire Club
XXXIII.	1863	Peeblesshire Society.	20 0 0	1	4	20 0 0	Peeblesshire Society
XXXIV.	1864	Edin. Caithness Association.	10 0 0	1	4	10 0 0	Edin. Caithness Association.
XXXV.	1864	A. H. Rhind of Sibster.	Interest of 500 0 0	1	4	About 20 0 0	Edin. Caithness Assc

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
XXXVI.	1865	Mrs Margt. Tyndall Bruce, of Falkland.	£165 0 0	3 3	3 3	£35 0 0 20 0 0	Senatus.
XXXVII.	1865	Horsliehill Scott.	76 17 6	2	2	33 6 2	Do.
XXXVIII.	1867	Miss Hannah Harrison, of Lasswade.	33 5 0	1	2	33 5 0	Do.
XXXIX.	1867	Rev. John Spence	About 200 0 0	5	2	1st Year 30 0 0 2nd Year 40 0 0	Governors of the Spence Bursary Trust.
XL.	1869 1872	Edin. Border Counties Association.	50 0 0	1 1	1 4	50 0 0 30 0 0 20 0 0	Edinburgh Border Counties Assoc.
XLI.	1869	Argyllshire, Bute, and Western Isles Asso.	12 0 0	1	4	About 12 0 0	Argyllshire Association.
XLII.	1870	Stewart of Ardvorlich.	16 0 0	1	4	16 0 0	Proprietor of the Estate of Ardvorlich.
XLIII.	1870	David Cowan.	About 35 0 0	1 1	2 1	About 30 0 0 20 0 0	Directors of Ayr Academy.
XLIV.	1871	J. Robertson Sibbald.	About 150 0 0	5	3	30 0 0	Tr. of Dr J. R. Sibbald.
XLV.	1872	Angus Club.	25 0 0	1	4	25 0 0	Angus Club.
XLVI.	1873	Earl of Zetland.	About 40 0 0	1	3	About 40 0 0	Trustees of Earl of Zetland.
XLVII.	1873	The Grierson Trus.	104 0 0	4 1	4 4	20 0 0 26 0 0	Senatus Acad.
XLVIII.	1874	Upper Ward of Lanarkshire.	20 0 0	2	4	20 0 0	Upper Ward Assoc.
XLIX.	1874	Johnstone of Harthope.	16 5 0	1	4	16 5 0	Senatus Acad.
L.	1874	James Lambert.	About 40 0 0	1	4	About 40 0 0	Senatus Acad.
LI.	1875	Robert Marshall.	32 10 0	1	4	32 10 0	Senatus Acad.
LII.	1876	J. Fothringham of Heathpool.	39 6 0	2	4	19 13 0	Senatus Acad.
LIII.	1877	Earl of Zetland.	About 40 0 0	1	3	About 40 0 0	Trustees.
LIV.	1878	Edin.E.Lothian Asso.	20 0 0	1	3	20 0 0	Association.
LV.	1878	Edin. University Endowment Asso.	120 0 0	6	3	20 0 0	Senatus Academicus.
LVI.	1878	Jas. Gillan, Forres.	63 0 0	3		21 0 0	Mr Gillan's Trustees.
LVII.	1878	Dr Andrew Thomson.	100 0 0	4	4	25 0 0	Trus. of Dr Thomson.
LVIII.	1880	Rev. John Patterson.	16 2 4	1	2	About 16 2 4	Senatus Academicus.
LIX.	1881	Thomas Carlyle.	About £160	8	4	20 0 0	Senatus Acad.
LX.	1883	Subscribers to Mackinnon Testimonial	£56 5 0	3	3	18 15 0	Senatus Acad.
LXI.	1882	James Whitelaw.	70 8 6	3	3	23 9 6	Senatus Acad.
LXII.	1883	William Renton, Edinburgh.	19 9 6	1	1	19 9 6	Profs. Chrystal, Tait, Crum Brown, and Nicholson.
LXIII.	1883	Isabella Macdougall	About 120 4 3	4	3	About 30 0 0	Trustees.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
LXIV.	1886	Rob. P. Newton of Castlandhill.	87 6 8	4	2	21 16 8	Senatus Academicus.
LXV.	1886	Pet. C. Mann of Nairn and Durham.	80 0 0 About	3	3	26 13 4 About	Senatus Academicus.
LXVI.	1886	Richd. Allan, Feuar, Kelso.	90 0 0	3	3	30 0 0	Trustees of R. Allan.
LXVII.	1887	Mrs Kidd of Aigbarth, near Liverpool.	33 9 4 About	1	4	33 9 4 About	Senatus Academicus
LXVIII.	1887	Charles Jardine of Thorlieshope.	150 10 8 About	4	4	37 12 8 About	Senatus Academicus.
LXIX.	1887	Charles Howatson, Esq. of Dornel and Glenbuck.	27 0 0 About	1	3	27 0 0 About	Trustees.
LXX.	1888	Mrs Harriet E. Morrison.	27 0 0 About	1	4	27 0 0 About	Senatus Academicus.
LXXI.	1889	Daniel Maclaurin, London.	73 10 0 About	1	4	73 10 0	Town Council.
LXXII.	1889	James Simson, Edinburgh.	150 0 0	6	3	25 0 0	Presbytery of Edinburgh.
LXXIII.	1890	George Cousin.	28 0 0	1	3	28 0 0	Senatus Academicus.
LXXIV.	1890	Rev. Thomas Maule.	80 0 0	4	6	20 0 0	Principal, and Profs. of Humanity and Greek.
LXXV.	1891	Donald Fraser, M.D., London, and Association for the Better Endowment of the University.	50 0 0	1	1	50 0 0	Senatus Academicus.

Conditions of Foundations and Names of Bursars.

I. These *Heriot Bursaries* are for Students unconnected with the Hospital School, entering upon a regular Curriculum in Arts or Science with a view to graduation. (For remodelled scheme, see Calendar, 1887-88, p. 498.) *Bursars*—1891, Charles S. Pennell. 1892, David Nichol Smith, William D. Falconer. 1893, R. M. Rowe, Alexander Brown, M. C. M'Alpin, D. M. Aitken, J. W. Stewart, J. F. M. Doig, James G. S. Jamieson. 1894, David H. M'Gregor, Alex. Flint, John A. Gray, James M. Low, Alex. Sutherland.

Do., for Girls. These Bursaries are for Girls Matriculating for the first time at the University with a view to graduation in Arts or Science, and cannot be held along with any other Bursary or Scholarship. *Bursars*—1892, Sarah W. Davison, Elizabeth W. Garrett, Ethelwyn L. Lemon, Mary S. M. Bell, Margaret L. Thomson. 1893, Mary P. S. Cook, Helen Cameron, Catherine G. Lowson, Charlotte E. Tweedie, Rosa Stoltz, Isobel B. Mason, Agnes H. Pitcairn, Netta R. Duncan. 1894, Jeanie C. Thomson, Isab. M. Ogilvie, Jessie A. M'Kechnie, Jane M. Symington, Annie Macdonald, Amy Thomson, Grace F. Matthew, Isab. C. Black.

Do., High School University Bursaries. These are awarded by competitive examination among Scholars attending the High School, Edinburgh, and may be held at any University approved by the Governors. *Bursars*—1892, R. W. MacKenna, W. S. Simpson. 1893, F. C. Matthew, Gavin Millar. 1894, Andw. J. Forrest, John Ross, W. M. Henderson.

II. *A. Johnston Bursary.*—Each Bursar is entitled to hold this Bursary for four years, subject to the conditions that he shall pass such examination as may be required of Presentation Bursars, and shall proceed through the Curriculum in Arts, and pass the Examinations for M.A. appropriate to each year. No one is permitted to hold the Bursary along with any other Bursary in the University. The Bursar must attend the Classes in the Arts Curriculum.

III. *Trotter and Penman Bursary.* This Bursary is held under the same conditions as No. II.

IV. *Wight, M'Call, and Christie Bursary.* This Bursary is held under the same conditions as No. II.

V. and VI. *R. Johnstone Bursaries.*—By Ordinance No. 82, the holder of each of the four Robert Johnstone Bursaries is entitled to hold his Bursary for four years, subject to the condition that he shall pass the Preliminary Examination or its equivalent, and shall proceed through the Curriculum in Arts, and regularly pass the Examinations required of Students proceeding to the degree of M.A. No person is allowed to hold any of these Bursaries along with any other Bursary in the University. *Bursar*—1892, Charles T. Magregor.

VII. *Weir, Jenkins, Hepburn, and Lightbody Bursary.*—For a Student in Arts, who must pass the Preliminary Examination or its equivalent, and follow the Curriculum for the Degree of M.A.

VIII. The *Dalgliesh and Macmorran* Bursar must pass the Preliminary Examination or its equivalent, and proceed through the Curriculum in Arts in the University, and regularly pass the Examinations required of Students proceeding to the Degree of M.A.

IX. *Penman Bursary.*—The Bursar must attend the Classes in the Arts Curriculum.

X. Each *Ford* Bursar is entitled to hold his Bursary for four years, subject to the condition that he shall pass the Preliminary Examination or its equivalent, and shall proceed through the Curriculum in Arts, and regularly pass the Departmental Examinations required of Students proceeding to the Degree of M.A. No person is permitted to hold any of the Bursaries along with any other Bursary in the University.

XI. The *Sir A. Ramsay* Bursar holds his Bursary for four years, subject to the condition that he shall pass the Preliminary Examination or its equivalent, and shall proceed through the Curriculum in Arts, and regularly pass the Examinations required of Students proceeding to the degree of M.A. No person is permitted to hold either of the Bursaries along with any other Bursary, Fellowship, or Scholarship of any Scottish University.

XII. The *Chrystie Bursary* is usually held for four years. Candidates must pass the Preliminary Examination or its equivalent. The Bursar is taken bound to attend "the usual classes," and must produce yearly to the Faculty certificates from the respective Professors of his due attendance, and the diligent prosecution of his studies. Candidates are referred for information to the Clerk to the Faculty of Advocates, Advocates' Library.

XIII. The *Bryson* Bursars must pass the Preliminary Examination or its equivalent, and are first to enter the Humanity class: afterwards to pass through the rest of the classes in Arts until their Laureation; at which time, if judged by the ministers of the Presbytery of Dunbar fit for the study of Theology, they may continue for two years in Theology.

XIV. The *Pringle and Wardrop Bursary.*—The Bursar must pass the Preliminary Examination or its equivalent, and attend the classes in the Curriculum in Arts for M.A.

XV. The *Brown Bursaries* are payable to Bursars who must pass the Preliminary Examination or its equivalent, and attend the regular course of study in Arts for M.A.

XVI. The *Mitchell and Shortt Bursary* is payable to a Student who must pass the Preliminary Examination or its equivalent, during the regular course in the Faculty of Arts.

XVII. *Dundas Bursaries.*—By Ordinance No. 78 of the Universities' Commissioners, each person presented to either of the Dundas Bursaries is entitled to hold the same for four years as a Student of Arts, subject to the conditions that he shall pass the Preliminary Eamination or its equivalent, and proceed through the Curriculum in Arts, and shall regularly pass the Examinations required for M.A. These Bursaries cannot be held with any other Bursary in the University.

XVIII. The *Fraser Bursaries.*—Bursars must pass the Preliminary Examination or its equivalent, and proceed through the curriculum till they finish their course and take the Degree in the Faculty of Arts. The Bursaries are held for three years thereafter; the Bursars making their election whether to follow Divinity, Law, or Medicine. Two Classes at least must be attended each Winter Session. Candidates should apply to the City Clerk, Council Chambers, Edinburgh.

XIX. The conditions of the *Hume Mortification* correspond with those of Bryson's, No. XIII., and the presentations and payments are made as in that case.

XX. *Millar Bursary.*—To be held by a Student intended for the Ministry in the Church of Scotland, during his Curriculum in the Faculty of Arts. Bursar must pass the Preliminary Examination or its equivalent.

XXI. The *Grant Mortification.* Tenable in the Faculties of Arts, Divinity, Law, or Medicine. Application for information may be made to Messrs Mackenzie, Innes, & Logan, W.S., 23 Queen Street, Edinburgh. *Bursars*—1894 Alexander Grant, Donald Grant.

XXII. *Stuart Bursaries.*—Open to Students entering upon the second year o

heir course for graduation in Arts or in Pure Science. The said Bursaries shall be tenable for three years, provided that if the holders graduate at the end of their second year of tenure they shall only retain their Bursaries during the third year of tenure if they engage in a course of study approved by the Senatus Academicus in subjects included in the Curriculum for Degrees in Arts or in Pure Science. *Bursars*—1892, Edward E. Braine, John D. Comrie. 1894, Alexander Brown.

XXIII. *Menzies.*—These Bursaries, four in number, were founded in 1837 by James Menzies, Esq., Glasgow. They are of the annual value of £45 each, but vary in amount at discretion of the patrons, and tenable for four years, in any one of the Universities of St Andrews, Glasgow, or Edinburgh. Preference first to the relations of the Founder: next, to the name of Menzies; failing whom, to persons born on the estate of Sir Robert Menzies, Bart., within the parishes of Dull, Weem, and Fortingall; failing whom, any Student who shall be found best qualified may be appointed. Candidates must pass the Preliminary Examination.

XXIV. *The Dow Bursaries* are tenable for four years, "at any of the Scottish Universities, St Andrews in preference." Apply to the Patrons.

XXV. The *Blair* Bursar must pass the Preliminary Examination and attend the Classes in the required order, and pass the Examinations necessary for the Degree of M.A. *Bursar*—

XXVI. The *Jamieson Bursary* is for the benefit of the sons of schoolmasters, farmers, mechanics, and labourers, born and residing within any one of the following parishes—viz., Crawfordjohn, Crawford, united parishes of Lamington and Wandell, united parishes of Wiston and Roberton, Culter and Biggar. The Bursar must pass the Preliminary Examination or its equivalent. He may attend Classes in any of the Faculties. *Bursar*—1893, G. C. Rankin.

XXVII. Called the "*Jardine Bursary*," being founded by Mr Bidder, C.E., as a memorial of the munificence of Sir Henry Jardine to him, to which he owed the advantage of his education at the University of Edinburgh. Candidates must be natives of Scotland. The Bursar must pass the Preliminary Examination or its equivalent, and attend the Classes, and pass the Examinations necessary for the Degree in Arts. *Bursar*—1892, John S. Begg.

XXVIII. *Lennie Bursaries.*—Bursars must pass the Preliminary Examination or its equivalent, and attend the Classes in the Arts Curriculum. Candidates should apply to the City Clerk, Council Chambers, Edinburgh.

XXIX. *Bruce Bursaries.*—Prior to the commencement of each Winter Session, five Students are presented yearly, the most distinguished of the five receiving the £40 Bursary. The Bursars must be in regular attendance on the Classes necessary for the Degree of Master of Arts. Candidates announce their names at the Council Chambers to the City Clerk.

XXX. The *M'Diarmid Bursary* is a memorial of the late John M'Diarmid, Esq., Editor of the *Dumfries and Galloway Courier*. Candidates must be natives of the county of Dumfries or the stewartry of Kirkcudbright. The Bursar must pass the Preliminary Examination and attend the Classes and Examinations necessary for the Degree of Master of Arts. Applications regarding the Bursary to be made to "H. Gordon, Esq., Dumfries." *Bursar*—1892, William H. Sellar.

XXXI. The *Patrick Bursaries* are for the assistance of those who have completed a course of education at any of the public schools or academies in the county of Ayr, where a course of Classical Study is pursued. Their value fluctuates, being the dividend on £3000 Glasgow and South-Western Railway Stock. The Bursars must attend the Classes and Examinations necessary for the Degree in Arts, in the order required by the Faculty. *See* p. 197 of CALENDAR for 1865-66. *Bursars*—1894, 1st, James M. Dunnett; 2nd, John Millar.

XXXII. *Ayrshire Club Bursaries.*—Awarded after competitive examination to natives of Ayrshire requiring aid, and tenable during the Curriculum in Arts, on condition of regular attendance at the Classes, with a view to the Degree. Information will be afforded by the Secretary of the Club, Mr A. H. Cooper, W.S., 8 S. Charlotte Street. *Bursars*—1891, Wm. S. Nicholson; 1892, George H. Donald.

XXXIII. *Peeblesshire Bursary.*—Open to Candidates of either sex who intend to pursue the Curriculum in Arts, Science or Medicine. Apply to the Secretary of the Society, Mr P. H. Cosens, W.S., 17 Duke Street, Edinburgh. *Bursar*—1894, Robert Weatherston.

XXXIV. and XXXV. *Caithness and Rhind Bursaries.*—Bursars must attend Classes in Arts Curriculum. Apply to Secretary of the Association.

XXXVI. *Bruce of Grangehill and Falkland's Bursaries.*—Three of these Bursaries, of the annual value of £35, are awarded after competitive examination to Students of the *second* year in their course of study for a Degree in Arts; and three others, of the annual value of £20, to Students entering the *first* year of the Arts Curriculum. *Bursars*—1893, First year, Alfred G. Hogg; 1894, J. S. Wilson; second year, W. D. Ross; 1894, T. S. Macpherson.

XXXVII. *Horsliehill-Scott Bursaries.*—Annual value £33, 6s. 2d., under deduction of £6, 6s. for Examiners' fees from first year's payments. Open to Students in the *third* year of their course for a Degree in Arts, and tenable for two years. The examination is in Classics, Mathematics, and Logic and Metaphysics. Deed of Foundation, at p. 208 of CALENDAR for 1866-67. *Bursars*—1893, R. C. M. Bell; Alexander M'Gregor.

XXXVIII. The *Harrison Bursary* is of the annual value of £35, 5s., under deduction of £6, 6s. of Examiners' fees from first year's payments. Open to Students in the *third* year of their course in the Faculty of Arts, with a view to a degree, and is tenable for two years. It is to be awarded to the competitor who shall shew the greatest proficiency in Classics, Mathematics, and Logic and Metaphysics. *See* Deed of Endowment, p. 231 of CALENDAR for 1867-68. *Bursar*—1893, Peter M'Gregor.

XXXIX. *Spence Bursaries.*—By the regulations of the Governors, two Bursaries, each of the annual value of £30 for the first year and £40 for second year of tenure, are open only to Students who have studied in the University of Edinburgh, at the commencement of their second session in a three years' curriculum, or of their third session in a curriculum of four years. Examination in Latin, Greek, and Mathematics. Governors may award to any Bursar who has graduated or passed all the examinations for a Degree in Arts, a Bursary of £50 for one year, tenable in any of the other Faculties. See Scheme, p. 520 of CALENDAR

1889-90. Candidates apply to Mr Henry A. Patullo, Writer, Bank Street, Dundee, Factor to the Trust, for particulars.

XL. *Border Counties and Sir Walter Scott Bursaries.*—These Bursaries are open to competition by Scholars (women as well as men) who have attended any school in either of the Counties of Roxburgh, Berwick, Selkirk, or Borough of Berwick-on-Tweed, for two complete sessions immediately prior to the time of their examination for the Bursaries. The Bursars must attend the classes necessary for a Degree in Arts. Application to be made to Mr T. Usher, Sheriff Court House, Edinburgh. *Sir W. Scott Bursar*—1889, John Henderson. *Border Counties Bursar*—1891, John K. Graham.

XLI. *Argyllshire Bursary.* — Candidates must be natives of Argyllshire, Bute, or Western Islands. The holder must attend the classes necessary for a Degree in Arts. Application may be made to John Maclachlan, Esq., W.S., 43 Castle Street, Edinburgh.

XLII. *Ardvorlich Bursary.*—Open to Students of Arts, natives of the parishes of Comrie, Balquhidder, Callander, or Killin, failing whom, to natives of Perthshire, and failing such, to the best qualified candidate. The holder must pass the Preliminary Examination or its equivalent, and must attend Arts or Science classes. Application to be made to the Clerk of Senatus. For remodelled Foundation, see CALENDAR 1887-88, p. 501 ; for original deed, see p. 275 of CALENDAR for 1870-71. *Bursar*—1894, E. R. J. Stevenson.

XLIII. *Cowan Bursary.*—Candidates must be about to enter the Curriculum in Arts. Annual value for first two years £30, and £20 for third year, to be held alternately at Edinburgh and Glasgow Universities. Information will be afforded by J. G. M'Skimming, Esq., Ayr.

XLIV. *Sibbald Bursaries.*—The Bursaries are available to Students in the Faculties of Arts, Medicine, Law, or Divinity, and are open to Students entering the University who have not previously attended any University in the United Kingdom or elsewhere, *and who do not hold any other Bursary or Scholarship* : but no objection to a Candidate that he has, during the previous Summer Session, attended any of the Classes in the University of Edinburgh required by the Faculties of Medicine or Law. *See* CALENDAR for 1888-89. pp. 171 and 177. Application to be made to Messrs Mackenzie, Innes, & Logan, W.S., 23 Queen Street, Edinburgh. *Bursars*—1891, Chas. P. Edgar, James Y. Simpson ; 1892, William Eggeling, Donald Banks, William Porter.

XLV. *The Angus Club Bursary.*—Open to Forfarshire students entering the University for the first time. Application should be made to the Secretary of the Club, Mr William Whyte, S.S.C., 4 Albyn Place.

XLVI. *Orkney and Zetland Bursary.*—Open to first year Students (male or female), natives, or children of parents who are natives of the County of Orkney and Zetland. It is tenable for three years. The Bursar must attend the Classes in the Curriculum in Arts, with a view to a Degree. Applications to be sent to Messrs Dundas & Wilson, C.S., 17 St Andrew Square, Edinburgh. The Deed of Foundation will be found in CALENDAR for 1873-74, p. 329.

XLVII. *Grierson Bursaries.*—Four Bursaries of £20 each, and one of £26,

awarded annually in November, under the patronage of the Senatus. They are restricted in the first place to natives of either of the parishes of Crawford or Leadhills, who must pass an examination, satisfactory to the Senatus, in Elementary Latin, English, and Arithmetic. In the event of more than one preferential Candidate, the examination is competitive among such candidates. If no preferential Candidates, the Bursaries are thrown open for competition to all Students then intending to enrol in the University for the First Session of the Curriculum in Arts, the subjects of examination being those prescribed for Bursars of the First Year. *See* Trust Disposition of Founder at p. 335 of CALENDAR for 1873-74, and p. 368 of the CALENDAR for 1877-78. *Bursars*—1891, Robert L. Ross, Peter M'Gregor, Arthur G. Edie; 1893, William A. Curtis, James Lornie; 1894, T. W. Stewart (Preferential Candidate), A. J. Black (for two years).

XLVIII. *Lanarkshire* (Upper Ward of) *Bursaries.*—Bursars must attend the Classes in the Arts Curriculum. Mr R. Brown, Secretary, 28 St Andrew Square. *Bursar*—1888, J. D. P. M'Letchie.

XLIX. *Johnstone of Harthope Bursary.* Natives of Moffat, Peebles, and Students of the name of Alexander or Johnstone preferred, if applications (with proof of birth) be made to Secretary of Senatus before 1st of September. The successful candidate must attend the Classes in the Faculty of Arts, and take the Degree of M.A. *See* Deed of Foundation, at p. 350 of CALENDAR for 1875-76. *Bursar*—Archibald Alexander.

L. *Lambert Bursary.*—This Bursary cannot be instituted until after the death of an annuitant. *See* Deed of Foundation, at p. 342 of CALENDAR for 1875-76.

LI. *Marshall Bursary.*—Restricted in the first place to relatives of Founder, next to Students of the name of Marshall, and natives of West Lothian. *See* Deed of Foundation, at p. 347 of CALENDAR for 1876-77. *Bursar*—1892, John Chalmers.

LII. *Fothringham and Forrest Bursaries.* Relatives or namesakes of the Founder, then such as are of the name of Forrest, to be preferred. The successful candidate must attend the Classes in the Faculty of Arts, and take the Degree of M.A. *Bursar*—1893, Charles Macfie Campbell; 1894, Donald Banks.

LIII. *Earl of Zetland's Bursaries.*—These Bursaries are open to First Year Students in the Faculty of Arts, who are natives of the Islands or County of Orkney and Zetland, or children of parents, one or both of whom shall have been born in or connected for a long period of years with the said Islands or County. For Deed of Foundation of these Bursaries, *see* p. 373 of CALENDAR for 1877-78. Application to be made to Messrs Dundas & Wilson, C.S., 17 St Andrew Square, Edinburgh.

LIV. *Edinburgh East Lothian Association's Bursary.*—The Bursary may be competed for by any lad under the age of 18, who has been educated at any school in East Lothian, or who, having passed through all the standards or their equivalents at such schools, shall have afterwards attended for not more than three sessions any secondary school within or without the county. Application may be made to J. Purves, S.S.C., 65 Frederick Street.

LV. *Edinburgh University Endowment Association's Bursaries* are open to Students entering the Faculty of Arts for the first time, and tenable for three years.

Bursars must proceed through the Curriculum in Arts, and pass the Examinations for the Degree of M.A. Lapsed Bursaries may be awarded for one year to Students of the first or any year, whose merits have been attested in the usual Bursary Examination of their year. Cannot be held with any other Bursary in any Scottish University. *See* Minute of the Endowment Association, p. 375 of CALENDAR for 1878-79. *Bursars*—1892, Arthur H. Firth, Marshall N. G. Gray, C. C. Watson; 1893, Otto Rothfeld, Sidney G. Campbell, James G. S. Jamieson; 1894, Herbert Smiles.

LVI. *Gillan Bursaries.*—Founded in 1878 by James Gillan, draper, Forres. These Bursaries are for the support at the University, and at the New College, Edinburgh, of two young men connected with the parish of Forres, and one connected with Dyke, who have declared their intention to study for the ministry of the Free Church of Scotland. For particulars apply to Messrs R. & R. Urquhart, Solicitors, Forres.

LVII. *Thomson Bursaries.*—Candidates of the name of Thomson or Traquair, or natives of town or county of Dumfries or city of Edinburgh, preferred. *See* Deed of Foundation, p. 367 of CALENDAR, 1877-78, and Scheme of Allocation, p. 346 of CALENDAR, 1879-80. Applications to be made to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street. *Bursars*—1891, F. Guthrie Smith; 1892, Robert Gray; 1893, Allan W. C. Menzies; 1894, Victor Caldwell.

LVIII. *Patterson Bursary, in Anglo-Saxon, Grammar, and Literature.*—Open to Students in the second, third, or fourth year of their Matriculation who have attended the class of English Literature in the University. The Examination will include Anglo-Saxon, Grammar, Translations of passages of Anglo-Saxon prose and verse, and the History of Anglo-Saxon Literature. *See* Deed of Foundation at p. 379 of CALENDAR for 1880-81. *Bursar*—1894, D. N. Smith.

LIX. *John Welsh Bursaries*, founded by Thomas Carlyle in 1881, in memory of his Father-in-law, to whom the estate of Craigenputtock in Dumfriesshire, bequeathed by Mr Carlyle to the University of Edinburgh, formerly belonged. The Bursaries are paid from the rents of that estate, and are eight in number, of the value of about £20 each, tenable for four years. They are awarded, after competition, to Students entering the University, who have not studied in any other University. Four are to be given to the competitors most proficient in Mathematics, and four to those most proficient in Classics. They are not to be held with any other Bursary. *See* Deed of Foundation at p. 379 of CALENDAR for 1881-82. *Bursars*—(*Classical*)—1894, David L. Norrie, J. H. Cattanach. (*Mathematical*)—1892, Lapsed Bursary, W. C. Morton (for three years), William Dick, A. M. Anderson.

LX. *Mackinnon Bursaries.*—Three Bursaries about £18, 15s., tenable for three years, to encourage the study of the Mechanical Sciences. Each Bursary is open for competition to Students entering their First Session in the Faculty of Arts. Candidates must be natives of the counties of Argyll, Bute and Arran, Inverness, Ross or Sutherland, and must be able to speak the Gaelic language. The Examination is held at the annual competition for Bursaries at the beginning of each Session,

with an additional examination by the Professor of Celtic; at least 10 per cent. of the total marks attainable being assigned to Gaelic. Each Bursar is bound to attend at least two classes in the Faculty of Arts during his tenure, and among these six classes, at least one class of Mathematics, one of Natural Philosophy, and the class of Engineering. The Bursaries cannot be held along with any other Bursary, Scholarship, or Fellowship in a Scottish University, or with any office yielding an annual income of £50 or upwards, and is tenable only during good behaviour and proficiency. *Bursars*—1892, George MacLennan, Alexander M. Murchison; 1894, Roderick Macleod.

LXI. *Whitelaw Bursaries.* — In memory of James Whitelaw, Watchmaker. Three Bursaries, about £23 each, tenable for three years, open to Students about to enter, or who follow the Curriculum in Arts. Cannot be held along with any other Bursary, Scholarship, or Fellowship in a Scottish University, or with any office yielding £50 annually, or upwards. Examination in October annually. *Bursars*—1894, S. A. K. Wilson (for three years), John A. Gray (for two years), J. A. Davidson (for one year).

LXII. The *Renton Bursary*, founded by the Trustees of the late William Renton, 20 Royal Terrace, Edinburgh, is for a Student pursuing his studies in the classes of Natural Philosophy, Mathematics, Chemistry, and Political Economy, or such of them as he may consider proper, and who may require assistance. The Bursary is tenable for one year, and cannot be held by any one under the age of sixteen or above twenty-one. It is filled up in November each year. The Examination is conducted each year by the Assistant to one of the Professors of Natural Philosophy, Chemistry, and Mathematics in turn, and in the above-named order. *Bursar*—1894, G. D. Craig.

LXIII. The *Macdougall Bursaries* are open to Students of Edinburgh, Glasgow, and St Andrews Universities. Students attending the Gaelic Class to be preferred. The Bursaries cannot be held with any Bursary or appointment yielding £50 per annum. *See* Deed of Foundation at p. 435 of CALENDAR 1885-86. Application may be made to Mr W. C. Young, solicitor, Perth.

LXIV. *Newton Bursaries.*—Two are awarded annually, one to the most distinguished Student in the Junior Class of Natural Philosophy, and one in the Senior (Second) Class of Mathematics. The Bursaries are tenable for two years, and the Bursars must continue their studies in the higher branches of the subjects of their Bursaries, and at the end of the second year of tenure, either take Honours in Mathematics and Natural Philosophy, pass the 2nd B.Sc. Examination, or give other evidence of advanced study in Mathematics or Natural Philosophy. These Bursaries are not to be held with other Scholarships or Bursaries. *See* Deed of Foundation, p. 460 of CALENDAR, 1886-87. *Bursars* (*Math.*)—1894, J. C. Leighton; 1895, J. B. Meiklejohn. (*Nat. Phil.*)—1894, A. M. Gordon (lapsed); 1895,

LXV. *Mann Bursaries.*—(1.) Candidates must be children of residents in the town of Nairn, *i.e.*, one or both parents must have resided within the municipal boundaries for at least twelve months at any period prior to the competition. (2.) Applications must be lodged with the Clerk of Senatus at least three weeks

before the Annual Bursary Examination of the University, along with evidence of compliance with Rule I. (3.) One will be awarded annually to the candidate, matriculating for the first time in this University, who obtains the highest marks at the Entrance Bursary Examination in English, Latin, Greek, and Mathematics, provided the Examiners be satisfied with the standard he has attained. (4.) Each will be tenable for three years, value about £25 per annum. (5.) Failing candidates of the first year, the vacant Bursary will be awarded as a second year Bursary to the candidate who obtains the highest marks in the Bursary Examination for the second year; and, failing candidates of the first and second years, it will similarly be awarded as a third year Bursary. When awarded under this Rule it is tenable for one year only. (6.) Failing candidates qualified under Rule III. or Rule V., the Senatus may continue one of the Bursaries to its holder for a fourth year, provided he propose to continue his studies for a fourth year in some special subject. (7.) Each Bursar must be *bona fide* engaged in studying for a Degree in Arts or in Science, and must produce evidence at the end of each Winter Session that he has attended at least two classes in the Faculty of Arts, or in a Department of Science, and has made reasonable progress in his studies. (8.) Any breach of these regulations, or conduct unworthy of a scholar and a gentleman, will be punished by forfeiture of the Bursary. *See* Deed of Foundation, p. 497 of CALENDAR 1887-88, and Regulations at p. 544 of CALENDAR for 1890-91. *Bursars*—1893, John Matheson; 1894, A. M. Mackay, for one year; James Stewart, for one year; John Rose, for one year.

LXVI. *Allan Bursaries.*—These Bursaries are available to Students attending classes in any of the Faculties of Arts, Medicine, or Law, in the University of Edinburgh, or to Students attending the classes in said University necessary for Degrees in Science; and are tenable for three years or for such part of that period as the Bursar shall remain a Student at the University. In nominating Candidates for presentation to the Bursaries, care will be given to prefer such as have been born in the parish of Kelso, provided they are qualified by their previous education for entering the University. Apply to P. Stormonth Darling, Esq., writer, Kelso.

LXVII. *James Fairbairn Bursary*, founded by Mrs Kidd of Palmyra, Aigbarth, near Liverpool, in memory of James Fairbairn, late Governor of Heriot's Hospital, is open to competition to first year Students, and is tenable for four years. The Bursar is required to attend the Classes necessary for Graduation in Arts, and to take the Degree at the end of the Course. The Bursary cannot be held along with any other Bursary or Scholarship. *See* Deed of Foundation, p. 501 of CALENDAR, 1887-88. 1892, D. A. Macnaughton, for year and a half; 1893, Peter Thomsen.

LXVIII. *Jardine of Thorlieshope Bursaries.*—Natives of the rural districts of Roxburghshire and Dumfriesshire (villages and towns of the population of 2000 and upwards being excluded), who have attended the Public or Board Schools in said counties, to be preferred. In the event of there being no first year Candidates, the Bursaries will be thrown open to Candidates of the second, third, or fourth year in succession, but will be tenable for one year only. The Bursars are required to attend the Classes necessary for Graduation in Arts, and to take the Degree at the end of the Course. The Bursaries cannot be held along with any

other Bursary or Scholarship. See Deed of Foundation, p. 497 of CALENDAR, 1887-88. *Bursars*—1892, W. W. Smith; 1893, Richard Bell; 1894, John Pattison, Arch. S. Ballantyne.

LXIX. *The Glenbuck Bursary* may be held by a Student in any of the four Scotch Universities—preferably that of Glasgow or of Edinburgh. Candidates only are eligible who have resided not less than five years in the Parish of Muirkirk, and who have received part of their education at any school therein, or alternatively and postponed thereto, those who have been resident in any one of the Parishes of South Ayrshire for not less than five years, and who have received part of their education in any school in the same Parish. For further particulars, apply to R. A. Leslie, Inspector, Muirkirk.

LXX. *MacKenzie* (*Stornoway*) *Bursary.* — Candidates of the name of MacKenzie have a preference. The Examination is in English, Latin, Greek, and Mathematics, as for First Session Open Bursaries, and the Bursary will be awarded to the Candidate who stands highest, provided he has passed the Preliminary Examination in at least two subjects, one of which must be Latin, Greek, or Mathematics on the Higher Standard. Failing a preferential Candidate, the Bursary will be thrown open to competition as a first year Bursary in Arts. The Bursar is required to attend the Classes necessary for Graduation in Arts, and to take the Degree at the end of the course. For Regulations, *see* CALENDAR for 1895-96, p. 748.

LXXI. This Bursary, tenable for four years, is by the will of the founder to be called the "Maclaurin Bursary," and is restricted to Students of the Founder's name of Maclaurin (or in Gaelic orthography "Maclalhrin"). The holder must pass the Preliminary Examination. It may be held in any of the Faculties. *See* Deed of Foundation, p. 544 of CALENDAR for 1890-91.

LXXII. Six Bursaries, each of the annual value of £25, and tenable for three years in the Faculty of Arts. They are open to Students who, having passed the Preliminary Examination, are entering on the first year of the Course in Arts, and are studying for the Ministry of the Church of Scotland. For conditions of tenure and subjects of examination, apply to the Rev. Dr Langwill, Currie, or to Rev. John Patrick, B.D., Greenside, Edinburgh. *Bursars*—1893, W. A. Curtis, John Ewart, W. A. Dunnett. 1894, Thomas J. Barnett, Henry Duncan, W. MacKean.

LXXIII. *Bailie Cousin's Bursary* is open for competition to Students entering the Faculty of Arts on a regular course for the Degree of M.A. The holder must regularly pass the departmental examinations appropriate to each year. The Bursary cannot be held along with any Fellowship, Scholarship, or Bursary of any Scottish University, or with any situation or appointment yielding an annual income of £30 or upwards. For Deed of Foundation *see* CALENDAR 1891-92, page 536. *Bursar*—1894, William Dunbar.

LXXIV. *Maule Bursaries.*—These Bursaries are for the education of poor and deserving Students. They may be held by Students prosecuting their studies in any of the Faculties. The Examination is in Latin, Greek, Mathematics, and English for preferential Candidates. *See* Excerpt from Trust Deed, p. 543 of CALENDAR for 1891-92, and Deed of Foundation, in CALENDAR for

1894-95. *Bursars*—1894, David Robertson (six years), Donald J. Boyd (five years), Richard H. Moar (four years), W. A. G. Fallas (three years).

LXXV. *The Donald Fraser Bursary* is awarded for high merit in the University Class of Natural Philosophy, combined with proficiency in Laboratory Work. The Bursar is required to give assistance in the University Physical Laboratory, and to engage in research there. The Bursary cannot be held along with any other Fellowship, Scholarship, or Bursary in any Scottish University. *See* Deed of Foundation, p. 545 of CALENDAR for 1891-92. *Bursar*—1895, L. O. Critchley.

II.—PRIZES.[1]

I.—THE LORD RECTOR'S PRIZE.

The Lord Rectors since 1879 have, during their respective tenures of office, offered a Prize of Twenty-five Guineas annually, for the best Essay on a Historical Subject. The following are the names of the prizemen :—

1890. James Wallace.
1891. John Davidson, M.A.
1892. *Not awarded.*
1893. William L. Mathieson.
1893. *Proxime accessit*, R. Fleming Johnston.
1894. *Henry MacArthur.*

II.—EDINBURGH UNIVERSITY CLUB (OF LONDON) TRIENNIAL PRIZE.

A Prize of Twenty Guineas, open triennially, for competition in any of the Faculties by Graduates of not more than two years' standing, is offered by the Edinburgh University Club of London, for the best Essay on a subject prescribed by the Deans of the Faculties in rotation, subject to the approval of the Senatus. The Prize will be open in 1897.

1891. *John Davidson, M.A.*

III.—BRUCE OF GRANGEHILL AND FALKLAND'S PRIZE IN THE CLASSES OF LOGIC AND METAPHYSICS.

This Prize of £20 (with a supplementary Prize of £10 for the Junior Division of the Class) is awarded to the most distinguished student in this class, "on such conditions and competition as the Professor may direct, and on his decision," for excellence in the study of Logic and Metaphysics. It was founded in 1865, by Mrs Tyndall Bruce of Grange-

[1] The names of University Prizemen are retained in the CALENDAR for five years.

hill and Falkland, in commemoration of John Bruce, Professor of Logic and Metaphysics in the University, 1774-1786.

1891. Henry Barker.
1892. Hugh R. Mackintosh, M.A.
1893. H. P. Macmillan, M.A.
1894. J. B. Baillie, M.A.
1895. *Alexander Mair.*

IV.—GRAY PRIZES.

The Gray Prize Essay Fund was instituted in 1851, in terms of the Will of Simon Gray, Esq., of Mornington Crescent, London.

The Gray Trustees offer annually for competition, two prizes of £20 for the first, and £10 for the second best Essay on a subject to be intimated annually under Prizes open for the year.

For particulars apply to the Rev. W. Ritchie, D.D., Duns, Secretary to the Trustees.

The awards for the Session 1893-94 were as follows:—

1st Prize, divided between Francis Dewar Hill, Ratho, and Reginald Fleming Johnson, Edinburgh.

2nd Prize, divided between Marshall N. G. Gray, Edinburgh, and Thomas Hart, Edinburgh.

V.—DR MUIR'S PRIZES IN SANSKRIT AND COMPARATIVE PHILOLOGY.

In accordance with the intentions of the late Dr John Muir, and with the concurrence of Sir William Muir, the sum of £100, offered by Dr Muir in 1872 as a prize to the first candidate who should take the degree of Doctor of Science in Sanskrit and Comparative Philology within five years,—afterwards renewed, on the same terms, for another period of five years,—has now, together with the interest, been appropriated by the Senatus for Sanskrit and Comparative Philology Class Prizes. It is left to the discretion of the Professor to offer Class Prizes, not exceeding £25 in the aggregate, for competition.

1892. *No award.*
1893. Charles S. Edgar.
,, William Eggeling.
1894. Senior Class, 1st Prize, William Eggeling.
,, Senior Class, 2nd Prize, Charles S. Edgar.
1894. Junior Class, 1st Prize, William D. Proudfoot.
,, Junior Class, 2nd Prize, Donald Lamont.
1895. *Sidney G. Campbell.*

VI.—SCOTT AND DUNBAR PRIZE.

This Prize, of the value of about £20, was founded in 1872 by the Rev. Hew Scott, D.D., of Anstruther Wester, for encouraging the study of the Greek Language in the University of Edinburgh. It is

awarded annually to "the most deserving and learned student in the Greek Classes," after such Examination as may be directed by the Principal and the Professors of Divinity, Greek, and Humanity. *See* Deed of Foundation at p. 332 of CALENDAR, 1873-74.

1891. R. P. Davidson.
1894. James M. Moore.

1895. *W. J. Keith, M.A.* } equal.
,, *Alexr. M'Gregor* }

VII.—THE COUSIN PRIZE.

This Prize, founded in connection with the Class of Fine Art by the late David Cousin, Esq., is of the annual value of about £14, 14s. 6d., and is awarded at the close of each session for proficiency in Class Essays set from time to time by the Professor. *See* Excerpt from Mr Cousin's will in CALENDAR, 1880-81, p. 380.

1891. J. Malcolm Tait.
1892. W. Souter, M.A.
1893. Henry Barker.

1894. George Hart } equal.
,, J. Wilson Lowthian }
1895. *Charles Menmuir.*

VIII.—KELLAND MEMORIAL PRIZE.

The Committee for promoting a Memorial to the late Professor Kelland has handed over to the University the sum of £147, 10s., for the purpose of founding a Prize to be called the "Kelland Memorial Prize," to be awarded annually to the most distinguished Student in Pure Geometry in the Junior Mathematics Class.

1893. J. C. Leighton.

1894. *H. Wilkie.*

III.—SCHOLARSHIPS.[1]

I.—PITT CLUB CLASSICAL SCHOLARSHIP.

The Pitt Club Scholarship of the annual value of £57, 10s. 4d., tenable for four years. By ordinance No. 17 of the Scottish Universities' Commissioners of 1858 it is open for competition to all who have passed regularly through the Course in Arts in the University, and have been admitted to the Degree of M.A. in Edinburgh, at any time within four years before the competition takes place. The subjects embraced in the examination are CLASSICS and ENGLISH LITERATURE. The next competition may take place in April 1897.

1892. *Thomas Ross Mills, M.A.*

II.—MACKENZIE CLASSICAL SCHOLARSHIP.

This Scholarship was founded in 1862, by James Mackenzie, Esq., W.S., and is of the annual value of £121, 10s., tenable for four years. By ordinance No. 90 of the Scottish Universities' Commis-

[1] The names of University Scholars are retained in the CALENDAR for five years.

sioners of 1858, it is open for competition to all Graduates in Arts in the University of Edinburgh of not more than three years' standing at the time of the competition. Candidates are examined in CLASSICAL LITERATURE and in ENGLISH LITERATURE, and the Examination is conducted by three or more Examiners selected by the Senatus from their own body. It cannot be held along with any other Scholarship, Fellowship, or Bursary, of any Scottish University. The Examinations include—1. Translations from Latin and Greek authors; 2. Composition in Latin and Greek Prose; 3. Latin and Greek Literature, and History; 4. English Essay-Writing; 5. History of English Literature. The next competition may take place in April 1897.

1892. *William G. Wedderspoon, M.A.*

III.—SIR DAVID BAXTER MATHEMATICAL SCHOLARSHIP.

This Scholarship, founded by Sir David Baxter, Bart., of Kilmaron, is of the annual value of £61, 15s. 10d., and is tenable for four years. By the terms of the Deed of Foundation (given in the CALENDAR for 1864-65, p. 171) it is awarded for proficiency in the department of Mathematics, particularly in that branch of it which includes mechanical and physical science. Competitors must be Graduates in Arts of the University, of not more than four years' standing at the time of the competition, who have taken Honours in the department of Mathematics. The next competition may take place in April 1896.

1890. Charles E. Grange, M.A. | 1895. Not awarded.

IV.—SIR DAVID BAXTER PHILOSOPHICAL SCHOLARSHIP.

This Scholarship, also founded by Sir David Baxter, Bart., of Kilmaron, is of the annual value of £61, 15s. 10d., and is tenable for four years. By the terms of the Deed of Foundation (given in the CALENDAR for 1864-65, p. 171), it is awarded for proficiency in the Department of Mental Philosophy. Competitors must be Graduates in Arts of the University, of not more than four years' standing at the time of the competition, who have taken Honours in the department of Mental Philosophy. The subjects of examination are Logic, Metaphysics, and Moral Philosophy. The next competition may take place in April 1899.

1890. Duncan Mackenzie, M.A. | 1895. *J. B. Baillie, M.A.*

V.-VII.—JOHN EDWARD BAXTER SCHOLARSHIPS.

These Scholarships were founded in 1876, and are three in number, each of the annual value of about £86, 10s., and tenable for three

years. One is in the Department of Classical Literature, another in Mental Philosophy, and the third in Mathematics and Natural Philosophy. They are open for competition to all Masters of Arts of the University of not more than three years' standing at the time of the competition. The Scholarships in *Mathematics* and in *Classics* may be competed for in April 1896. *See* Deed of Foundation at p. 361 of CALENDAR for 1877-78.

1891. { W. E. Philip, M.A. / J. I. Craig, M.A. (Ma.) } equal | 1892. James Watt, M.A. (Cl.) | 1893. *A. B. Macaulay, M.A.* (Ph.)

VIII.—DRUMMOND MATHEMATICAL SCHOLARSHIP.

This Scholarship was founded in 1865 by Miss Elizabeth Drummond, in memory of her brother, Captain Drummond, R.E., Under Secretary for Ireland. It is of the annual value of £105, 12s. 6d., and is tenable for three years. By the Deed of Foundation (given at p. 198 of CALENDAR for 1865-66), it is open to Graduates in Arts of not more than three years' standing, who have graduated with Honours in the Department of Mathematics. It cannot be held with any other Bursary or Scholarship, and the holder is recommended to travel for the purpose of inspecting, in this and other countries, remarkable engineering and architectural structures, to extend his knowledge of the practical application of Mathematical principles; and, if required by the Senatus Academicus, to deliver reports on the principal structures examined by him, and the Mathematical principles exemplified thereby; which reports the Senatus may cause to be publicly read in the University or elsewhere in Edinburgh. The next competition may take place in April 1897.

1890. James Goodwillie, M.A. | 1893. *James Mitchell, M.A., B.Sc.*

IX.—BRUCE OF GRANGEHILL AND FALKLAND'S CLASSICAL SCHOLARSHIP.

This Scholarship, founded in 1865 by Mrs Tyndall Bruce of Falkland, is of the annual value of £100, and is tenable for three years, during two of which the studies of the Scholar must be prosecuted in the University of Edinburgh, but in the third year they may be prosecuted in an English or Foreign University. By the terms of the Deed of Foundation (given at p. 205 of the CALENDAR for 1866-67), this and the two following Scholarships held by Students who have passed their Examinations for the Degree of Master of Arts with Honours, have hitherto been conferred upon the most distinguished in that one of the Honours Departments which is appropriated for each year. The Scholarship cannot be conferred upon any one whose age exceeds twenty-three years, and it cannot be held with any other Scholarship or Fellowship of a Scottish University, or with any situation yielding an income of £100 per annum. In the event of the Scholarship becoming vacant during the period of

tenure, through resignation or otherwise, of the Scholar, then the sum falling in shall be bestowed by the Senatus for the remaining period of tenure on a Student attending the Divinity Classes who shall be reported by the Faculty of Theology to be a meritorious Student and deserving of the Scholarship. The next award may be made in April 1896.

1891. W. G. Wedderspoon, M.A. | 1895. No award.
1894. No award.

X.—BRUCE OF GRANGEHILL AND FALKLAND'S SCHOLARSHIP IN MENTAL PHILOSOPHY.

This Scholarship, founded in 1865 by Mrs Tyndall Bruce of Falkland, is of the annual value of £100, and is tenable for the same period, and under the same conditions as the preceding. The subjects of examination are Logic and Psychology, Metaphysics, Moral Philosophy, and History of Philosophy. The next award may be made in April 1898.

1892. Hugh R. Mackintosh, M.A. | 1895. *J. Macaskill, M.A.*

XI.—BRUCE OF GRANGEHILL AND FALKLAND'S MATHEMATICAL SCHOLARSHIP.

This Scholarship, founded in 1865 by Mrs Tyndall Bruce of Falkland, is of the annual value of £100, and is tenable for the same period, and under the same conditions as the preceding. The subjects of examination are Mathematics and Natural Philosophy. The next award may be made in April 1896.

1893. *Neil Macmichael, M.A.*

XII.—GRAY SCHOLARSHIP.

This Scholarship, founded by Mr Gray of Baad Park in 1864, is of the annual value of £86, 15s. 6d., and tenable for two years. The Scholarship is awarded for distinction in one of the Honours groups of subjects for the Degree of Master of Arts, or in one of the groups of subjects for the Final Examination for the Degree of Bachelor of Science, or in the Historical and Philosophical subjects of the examination for the Degree of Bachelor of Laws, or to Students in the Faculty of Divinity for distinction in the Final Examination for the Degree of Bachelor of Divinity. The Senatus Academicus, with the approval of the University Court, has power to make from time to time such regulations as they may deem necessary for appropriating the said Scholarship to various departments of study. The holder of the Scholarship is required, as a condition of tenure, to satisfy the Senatus Academicus that he is pursuing special higher studies, or that he is engaged in original research, either at the University of Edinburgh or at another University approved by the University Court, and he must also satisfy the Senatus Academicus of the importance of the work he proposes to undertake, and of his qualifications for such work.

XIII.—GILCHRIST SCHOLARSHIPS.

These Scholarships were founded in 1865 by the Trustees of the late Dr Gilchrist; they are three in number, each of the annual value of £100, and are open to natives of India who have passed competitive examinations at the Presidential Colleges of India. They are attached to the Medical, Law, and Literary Classes in the University.

XIV.-XV.—FETTES EXHIBITIONS.

These Exhibitions are each of the annual value of £60, and are tenable for four years. They are open annually for competition, one among the Foundationers alone, and the other among the Foundationers and such other pupils as have attended Fettes College regularly for not less than five years.

XVI.-XVII.—RHIND SCHOLARSHIPS.

These Scholarships were, in accordance with the will of the late A. H. Rhind, Esq., of Sibster, founded by his trustees on the reversion of his estate. They are two in number, one in the Department of Classical Literature, the other in that of Philosophy, are each of the annual value of £88, 7s. 6d., are tenable for not less than two years, or more than three years, and are open to Undergraduates and to Graduates of not more than three years' standing at the time of the competition. Competitors must have attended classes in this University for not less than three *winter* sessions or their equivalent, attendance being defined to mean that the competitors must present Certificates of having attended at least four classes during the period aforesaid, and of having duly performed the work of the classes. The successful Candidates may be required to undertake duties connected with the teaching of the University, or otherwise assist in some department of its operations. *See* Deed of Foundation at p. 323 of CALENDAR for 1874-75. The next competition for the Classical Scholarship may take place in April 1898, and the next competition for the Philosophical Scholarship may take place in April 1896.

1891. Lapsed Scholarship in Philosophy, John Davidson.	1891. R. P. Davidson, M.A. (Cl.
1891. J. Lewis M'Intyre, M.A. (Ph.)	1893. Lapsed Phil. Scholarship, W. F. Trotter. M.A.
	1895. *J. M. Moore, M.A.* (Cl.)

XVIII.—THE CHARLES MACLAREN SCHOLARSHIP.

This Scholarship, founded in 1871 by the Trustees of Mrs Maclaren, in memory of Charles Maclaren, Esq., the eminent geologist, is of the annual value of £108, 19s. 2d., and is tenable for three years. It is for the encouragement of the study of Mathematics and Natural Philosophy,

and is open to all graduates in Arts of not more than three years' standing at the time of the Competition (and under 30 years of age) who shall have taken honours in Mathematics. The successful competitors are to spend a few months in travelling and in examining remarkable Engineering and Architectural Structures, and to report to the Senatus, which report the Senatus may cause to be publicly read in the University. The Deed of Foundation is given at p. 324 of CALENDAR for 1873-74. The next competition may be in April 1896.

1890. Jas. F. M'Kean, M.A. | 1895. Not awarded,

XIX.—NEIL ARNOTT SCHOLARSHIP FOR EXPERIMENTAL PHYSICS.

This Scholarship, value about £38, 10s., was founded in 1874, and is awarded annually to the most distinguished Student in the Physical Laboratory of the University.

The recipient must, during the ensuing Summer and Winter Sessions, assist the Professor of Natural Philosophy in the Laboratory. Failing a Student deemed by the Professor worthy of the Scholarship, it may be given to the Candidate for a Degree in Arts who has undergone the Examination in Natural Philosophy with most distinction. *See* Deed of Foundation, at p. 340 of CALENDAR for 1875-76.

1891. T. C. Baillie.
1892. H. Walker.
1893. J. A. Macdonald.
1894. A. D. Russell.
1895. *P. St C. Hardie.*

XX.-XXII.—FERGUSON SCHOLARSHIPS.

The examination of Candidates for Three of these Scholarships, each of the annual value of £80, and tenable for two years, will be held in Glasgow, on Tuesday, 24th September 1895, and following day. One of the Scholarships to be awarded for the greatest proficiency in Classics; one for the greatest proficiency in Mathematics, including Natural Philosophy; and one for the greatest proficiency in Mental Philosophy, including Logic, Metaphysics, and Moral Philosophy.

The Competition is open to "all persons who have passed the Examinations required for the Degree of Master of Arts in one of the Universities of Scotland (whether taking the Degree at the same time or not) provided that at the time of the Competition not more than six years have elapsed since the date of their first matriculation after having passed the Preliminary Examination, and who have not already gained one of these Scholarships." Candidates are required to enter their names at the Office of the Ferguson Bequest Fund, 94 Bath Street, Glasgow, not later than 1st September 1895.

For further information apply at the Office of The Ferguson Bequest Fund, 94 Bath Street, Glasgow.

The following Students of the University of Edinburgh have obtained Ferguson Scholarships during the last five years :—

1890. Patrick Duncan, M.A. (Cl.)	1891. Henry Barker, M.A., (Phil.)
,, Charles Mackinnon Douglas, M.A., (Phil.)	1892. Wm. Edward Philip, M.A., (Math.)
1891. James Holm, of Glas. and Edin. Universities, (Math.)	,, Hugh Ross Mackintosh M.A., (Phil.) one half.

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Alex. Wm. Mair, M.A., of Aberdeen University, Classical.
Wm. Garden Fraser, M.A., of Aberdeen University, Mathematical.
Norman Duncan Smith, M.A., of St Andrews University, Philosophical.

XXIII.-XXXII. VANS DUNLOP SCHOLARSHIPS.

TEN VANS DUNLOP SCHOLARSHIPS, each of the annual value of £100, and tenable for three years, are, by the Deed of Foundation, appropriated to the following subjects :—1. English Literature and Poetry ; 2. Classical Learning—Latin and Greek ; 3. Commercial and Political Economy and Mercantile Law ; 4. Logic and Metaphysics ; 5. Natural Philosophy ; 6. Mathematics ; 7. Hebrew and Oriental (Semitic) Languages ; 8. History ; 9. Moral Philosophy ; 10. Sanskrit. In terms of the Trust-Disposition (which is given at p. 380 of CALENDAR for 1880-81), the Scholarships are given only for "distinguished proficiency" in the various subjects of competition, as determined by the Examiners and the Senatus Academicus.

The following are the General Regulations for the Examinations :—

In the Competitions for these Scholarships, Candidates must have regularly attended in at least one class in the University of Edinburgh during each Winter Session in which they claim to have been Matriculated Students, and no Candidate is eligible who has discontinued attendance at the University for more than one year.

Each Scholarship is tenable on condition that the Scholar submits annually to the University evidence that he is prosecuting his studies, or his professional work, in a manner satisfactory to the Senatus. The evidence may consist of—(1.) Certificates of attendance on Lectures or Laboratories in this or some other University ; or (2.) Certificate of having acted as Assistant to a Professor in this or some other University ; or (3.) A written Report of work done by the Scholar during the year, together with a Thesis composed by himself on a subject connected with that work.

Not more than one of these Scholarships can be held by the same person, and Vans Dunlop Scholars cannot hold any other Fellowship, Scholarship, or Bursary in the University of Edinburgh.

Candidates for the Vans Dunlop Scholarships must, on entering

for the Examinations, produce evidence that they have fulfilled the conditions as to eligibility of Candidates.

In the case of Scholarships where attendance on classes may be discontinued for not more than one year, Candidates are required to pay the Matriculation Fee for the year in which the competition takes place.

The names of Candidates highly distinguished in the Vans Dunlop Scholarship examinations may be published.

XXIII.—English Literature and Poetry.

Candidates are subjected to an Examination testing—(1.) Knowledge of the History of English Literature generally, and more particularly through a prescribed period; (2.) Acquaintance with certain books, chiefly of English Poetry, prescribed for special reading; (3.) Ability in English Composition, in the form of an Essay, written in the Examination Room, on some subject of literary criticism.

The Competition is open to all Matriculated Students in the second, third, or fourth year of their Matriculation, who have given regular attendance in the Class of Rhetoric and English Literature. The next Competition will take place in April 1897.

The Professor of Rhetoric and English Literature, and an Examiner appointed by the Senatus, are the Examiners.

1891. George Liddell.
Proxime accesserunt, And. Hamilton, M.A., and Stewart A. Robertson.
1894. Thomas Hart.
Prox. accessit, D. Nichol Smith.

XXIV.—Classical Learning—Latin and Greek.

1. *Latin*—The Examination will test:—
   (*a.*) Knowledge of Latin books and special subjects previously prescribed.
   (*b.*) Power of Latin Composition, and of translating from Latin authors not previously prescribed.
2. *Greek.*—(*a.*) Knowledge of Greek books previously prescribed.
   (*b.*) Power of Greek Composition, and of translating from Greek authors not prescribed.
   (*c.*) Knowledge of Greek History and Literature.

The Competition is open to Matriculated Students in their second, third, or fourth Session who have completed attendance in the Latin and Greek Classes necessary for graduation in Arts.

Any one who in the previous April may have completed his course for graduation in Arts in three Sessions may take part in the Competition, although not actually a Student in the Session during which the Examination takes place. The next Competition may take place in October 1896, or April 1897.

The Professors of Humanity and Greek are the Examiners.

1890. J. A. Norrie. | 1893. *W. W. M'Kechnie.*

XXV.—Commercial and Political Economy and Mercantile Law.

(*a.*) Candidates are subject to an Examination testing their knowledge (1.) of Commercial and Political Economy, and (2.) of Mercantile Law—two papers on the former and one on the latter.

(*b.*) The Competition is open to all who have been Matriculated Students for not less than two years, and who have regularly attended the Class of Commercial and Political Economy and Mercantile Law. The next Competition may take place in October 1895.

(*c.*) The Professor of Political Economy and an Examiner nominated by the Senatus are the Examiners.

1891. No award.
1892. *Cameron Morrison, M.A., LL.B.*

XXVI.—Logic and Metaphysics.

The Examination will test knowledge of (*a.*) Psychology, (*b.*) Logic, (*c.*) Metaphysics and the History of Philosophy. It will include the subjects embraced in the Lectures on each of these branches; also prescribed Reading and Studies of special subjects.

The Competition is open to all who have been Matriculated Students for not less than two nor more than six years, and who have regularly attended the Junior and Advanced Classes of Logic and Metaphysics. The next Competition will take place in April 1897.

The Professor of Logic and Metaphysics and the Professor of Moral Philosophy are the Examiners.

1891. Henry Barker, M.A. | 1894. *Hugh R. MacKintosh, M.A.*

XXVII.—Natural Philosophy.

The Examination will test the knowledge of the Candidates in Experimental Physics and Applied Mathematics. The Competition is restricted to Matriculated Students who have passed at least two and not more than six Sessions at the University, and who have attended the classes of Natural Philosophy. The next Examination will take place in April 1898.

The Professor of Natural Philosophy and an Examiner appointed by the Senatus are the Examiners.

1892. J. C. Beattie.
1895. *J. F. Cameron, M.A.*

XXVIII.—Mathematics.

The Examination will test Candidates in pure mathematical subjects in the Honours Department for the Degree of Master of Arts, and in special subjects to be prescribed by the Examiners from time to time. The Competition is confined to Matriculated Students who have passed

at least two and not more than six complete Sessions at the University of Edinburgh, and who have attended at least two of the Mathematical Classes, one of these being the third or Advanced Class. No student is eligible who has discontinued attendance at the University for more than a year. The next Examination will take place in April 1898.

The Professor of Mathematics and an Examiner appointed by the Senatus are the Examiners.

1892. William Leslie Thomson, M.A.
1895. *J. A. Johnston, M.A.*

XXIX.—Hebrew and Oriental (Semitic) Languages.

The Competition is open to all Matriculated Students (*a*) who have regularly attended Classes in the University for not less than two and not more than seven years, (*b*) who have attended at least two courses under the Professor of Hebrew and Oriental Languages.

Candidates will be examined in Hebrew, Syriac, and Arabic.

The Examiners are the Professor of Hebrew and Oriental Languages, and an Examiner appointed by the Senatus. The next Competition will take place at the end of Winter Session 1895-96.

1893. *William B. Stevenson, M.A.*

XXX.—History.

The Competition is open to all Matriculated Students who have regularly attended classes in the University for not less than two and not more than six years, and who have also attended one or more courses of Lectures either by the Professor of History or by the Professor of Ecclesiastical History.

The Scholarship will be awarded by competitive examination. The Examiners are the Professors of History, the Professor of Ecclesiastical History, and either the Professor of Humanity or the Professor of Greek. The next Competition will take place in October 1895.

1892. *John Linton, M.A.*

XXXI.—Moral Philosophy.

The Competition is open to all who have been Matriculated Students for not less than two nor more than six years, and who have regularly attended the Ordinary and Advanced Classes of Moral Philosophy.

The Professor of Moral Philosophy and the Professor of Logic and Metaphysics are the Examiners. The next Competition will take place in April 1898.

1892. John Davidson, M.A. | 1895. *Alexander Mair.*

XXXII.—Sanskrit and Comparative Philology.

The Competition is open to all Matriculated Students who have regularly attended classes in the University for not less than two and not

more than seven years; and who have also attended at least two courses under the Professor of Sanskrit and Comparative Philology.

The Examiners are the Professor of Sanskrit and Comparative Philology, and another Examiner to be appointed by the Senatus. The next Competition will take place in April 1898.

1892. John Maclennan, M.A. | 1895. *William Eggeling.*

XXXIII.—SKIRVING SCHOLARSHIP FOR MORAL PHILOSOPHY.

This scholarship is to be founded (after the death of an annuitant) in accordance with the Will of the late David Skirving, of No. 13 Westbourne Park, London. It will be of the annual value of about £50, and tenable for three years. *See* Deed of Foundation at p. 350 of CALENDAR for 1876-77.

XXXIV.—LANG SCHOLARSHIPS.

This is a Bequest by the late John Lang, Esq. of Warren Park, Ayrshire, with the object of founding four Scholarships, to be called the "Lang Scholarships," one in Natural Philosophy, one in Mathematics, one in Chemistry, and one in Botany. The capital sum will be payable on the death of the survivor of two liferenters.

XXXV.—MACKAY SMITH SCHOLARSHIP IN NATURAL PHILOSOPHY.

This Scholarship is of the annual value of £25, tenable for two years, and is open for competition to Students who have attended the Class of Natural Philosophy in this University. The successful candidate is required to attend the class of Natural Philosophy, or to prosecute the study of Natural Philosophy, during at least one year of his tenure of the Scholarship, in such way as the Senatus may direct or approve. The next award may be made in April 1896.

1892. J. G. Anderson. | 1894. *J. F. Cameron.*

XXXVI.—SCOTT SCHOLARSHIP.

This Scholarship, of about £30, is awarded annually (a previous holder not being ineligible for re-election), for the purpose of assisting Graduates in Arts of the University, of not more than three years' standing at the date of their election as Scholars, to travel for purposes of Study or Research. Applicants are required to state:—1. The purpose for which they desire to use the Scholarship; and 2. What other means they have towards the object in view. The award will be based - (1) On the importance of the work to be undertaken; (2) the sufficiency of the means proposed to be applied to the work; (3) the capability of the applicant for the work he proposes to under-

take. The holders are required in all cases to satisfy the Senatus, by half yearly reports that they are carrying out the work undertaken; and must present a final report or deliver a short Course of Lectures on their work when completed. The appointment is made by the Senatus on a report by the Faculty of Arts on the merits of the applicants. The first competition will be open to all Graduates in Arts qualified as above, but thereafter preference will be given to Candidates desiring to undertake work in the following groups of subjects, under the following scheme of rotation, provided always that a suitable Candidate presents himself:—(1) Classical Languages and Classical Archæology; (2) Mental Philosophy; (3) Mathematical and Physical Science; (4) Semitic and Indian Languages; (5) English and Modern Languages; (6) History. The first award may be made in April 1896. See Regulations in CALENDAR for 1894-95.

XXXVII.—MACPHERSON SCHOLARSHIP.

This Scholarship is awarded by the Senatus Academicus to a student who has passed all the examinations necessary for the degree of Master of Arts in the University of Edinburgh, with or without honours, who has included in his examination the subjects of Latin and Greek, and who has attended the class of Celtic and attained distinction in that subject. The scholar must study Celtic in any University or other place offering special facilities for Celtic study, subject to the approval of the Senatus Academicus. The Scholarship is of the annual value of about £85, 17s., and is tenable for one year. At the end of his period of tenure the scholar must submit to the Senatus Academicus a report of the work he has done, and of such further studies in Celtic as he proposes to prosecute, and the Senatus Academicus may, if they think fit, appoint him to the said Scholarship for a further period of one year.

IV.—FELLOWSHIPS.

I.—GUTHRIE FELLOWSHIP IN CLASSICAL LITERATURE.

This fellowship, founded in 1866 by James Guthrie, Esq., London, is of the annual value of £83, 15s., and is tenable for four years. By the terms of the Deed of Foundation (given at p. 210 of the CALENDAR for 1866-67) it is for proficiency in Classical Literature, and is open to Graduates in Arts of the University who have taken their Degree since the last competition. Students who have passed all their examinations for a Degree since the last competition, but have deferred graduating, are also eligible. It cannot be held along with any other Fellowship or Scholarship in a Scottish University. The next Competition may take place in April 1899.

1890. J. C. Smith, M.A. | 1895. *R. L. Ross, M.A.*

II.—SIR WILLIAM HAMILTON FELLOWSHIP IN MENTAL PHILOSOPHY.

This Fellowship, founded in 1866 by the Subscribers to the fund for a Memorial to the late Professor Sir William Hamilton, and by the Association for the better endowment of the University, is of the annual value of £83, 5s., and is tenable for three years. By the Deed of Foundation (given at p. 213 of CALENDAR for 1866-67), the Fellowship is open to all Graduates in Arts of the University of Edinburgh of not more than three years' standing at the time of the competition. It cannot be held along with any other Scholarship or Fellowship in a Scottish University. The subjects of examination are Logic, Metaphysics, Moral Philosophy, and the History of Philosophy. The next Competition may take place in April 1897.

1890. C. M. Douglas, M.A. | 1893. *J. Lewis M'Intyre, D.Sc.*

III.—SHAW FELLOWSHIP IN MENTAL PHILOSOPHY.

This Fellowship, founded in 1867 by Contributors to a Memorial to Sir James Shaw, Bart., a native of Ayrshire, afterwards Lord Mayor of, and M.P. for, London, and by the Association for the better endowment of the University, for the encouragement of the study of Logic, Psychology, Metaphysics, Moral Philosophy, and the History of Philosophy, is awarded after competitive examination on these subjects. It is open to Graduates in Arts of any of the four Scottish Universities, of not more than five years' standing at the time of the competition, is of the annual value of £140, 2s. 6d., and is tenable for five years. It cannot be held along with any other Fellowship, Scholarship, or Bursary in any Scottish University, and it is not open to the competition of any person who already holds a Fellowship in any English or Irish University, though the holder of the Shaw Fellowship will not be precluded from afterwards obtaining an English or Irish Fellowship. The holder is required during the fourth or fifth year of his tenure of the Fellowship to deliver in this University a Course of four Lectures on any of the subjects for the encouragement of the study of which the Fellowship was founded. The next Competition for the Fellowship may take place in April 1899. (Deed of Foundation, p. 237 of CALENDAR for 1868-69.)

1893. *Harry Barker, M.A.*

IV.—GEORGE HERIOT FELLOWSHIP.

This Fellowship of £100 is tenable for one year, and in special cases for a longer period, on the recommendation of the Senatus.

The Fellowship is open to Bachelors of Pure Science of the Univer-

sity of not more than five years' standing from his Bachelor's Degree, or to Masters of Arts with Honours, of the University, of not more than five years' standing from his Master's Degree, provided the Candidate has attended during his curriculum not less than two years at this University. It is awarded alternately by Competitive Examination in the following Groups or Departments of Study—(1) Mathematical, Physical, Experimental, and Natural Science; (2) Language and Literature; (3) Philosophy and History, in the order named.

The Examination is conducted by means of Theses on subjects connected with the special study or branch of research selected by the Candidates respectively, and approved by the Senatus three months before the Theses are lodged.

During his tenure the Fellow shall prosecute Research or Higher Special Study in some department of Literature, Philosophy, and History, or Pure Science, specified by him in his application for the Fellowship. The Stipend is payable half-yearly in advance. Before receiving any payment after the first the Fellow must submit to the Dean of the Faculty in which he is a Graduate a written report on the progress of the work in which he is engaged, with a programme of his future work. If this report and programme appear to be sufficient, the Dean will countersign the same and forward them to the Treasurer of the Heriot Trust as warrant for payment.

The Group or Department of Subjects of Examination for 1896 is Philosophy and History, embracing Logic and Metaphysics, Moral Philosophy, Political Economy, Education (Theory, History, and Art of), Philosophy of Law, History, Archæology and Art (History of), Constitutional Law and History, Roman Law, Public Law: and in the case of equality between competitors in two different subjects, preference will be given to the subjects in the above order.

Candidates are required to intimate to the Secretary of Senatus the proposed subjects of their Theses, and to state the manner in which they propose to fulfil the conditions of tenure if successful in gaining the Fellowship, on or before 1st June: and if the subjects be approved, Theses are required to be lodged with him on or before 1st October following. *See* Regulations in CALENDAR for 1895-96, page 746.

1894. *A. Forbes Watson, B.Sc.* (Chemistry).
J. D. F. Gilchrist, B.Sc., Ph.D. (Zoology).

WILLIAM DICKSON TRAVELLING FUND.

This Fund (the interest of which amounts to about £100 per annum) has been established for the purpose of assisting Graduates of any Faculty, of not more than Three Years' standing, to travel, for a shorter or longer period, for purposes of study or research. Grants from the Fund may be made to holders of Scholarships, Bursaries, &c. Applicants are required to state—"(1) The purpose for which the Applicants desire to get a Grant for travelling; (2) the total amount of expenditure

thought necessary; (3) the other means they have towards meeting this expenditure; and (4) the amount of the Grant required from the Fund." The award of a grant to be based on—"(1) The importance of the work proposed to be undertaken; (2) the sufficiency of the means proposed to be applied to the work; (3) the capability of the Applicants for the work they respectively propose to undertake." "Holders of Grants in all cases to satisfy the Senatus by periodical reports that they are carrying out satisfactorily the work or investigation undertaken; and to present a final report, or to deliver a course of public University Lectures on their work when completed." Applications must be lodged with the *Secretary of Senatus* on or before 15th March annually. For Deed of Endowment, *see* p. 514 of CALENDAR, 1889-90.

1895.—Grants were made to T. H. Milroy, M.B., C.M., B.Sc., £30; William Gracie, M.A., £20; J. Lawson Dick, M.B., C.M., £20.

THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is in the patronage of the Trustees of the British Museum, is of the annual value of £144, and is open to Graduates in any of the Faculties in this University who have obtained their Degrees after examination. For further particulars *see* under Faculty of Science, page 483.

FELLOWSHIPS, SCHOLARSHIPS, UNIVERSITY PRIZES, AND BURSARIES, OPEN FOR COMPETITION IN THE FACULTY OF ARTS DURING THE ACADEMIC YEAR COMMENCING 1ST OCTOBER 1895.[1]

Fellowships.[1]

1. *George Heriot's Fellowship*, No. IV. The Group or Department of Subjects for 1896 is Philosophy and History. *See* page 357.

Candidates are invited to intimate to the Secretary of Senatus the proposed subjects of their Theses, and to state the manner in which they propose to fulfil the conditions of tenure if successful in gaining the Fellowship, on or before 1st June 1896, and if the subjects be approved, Theses are required to be lodged with him on or before 1st October following.

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[1] For further information, and for information regarding other Fellowships, Scholarships, Bursaries, and Prizes, see above, under Fellowships, &c., where full information regarding the conditions and values, &c., are given. The values of the Fellowships, Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise and fall of the rate of interest, &c.

Scholarships.[1]

See Ordinance of the Universities' Commissioners—Regulations for Scholarships, &c.—which may come into force before September 1895. *Appendix, page* 17.

1. *Rhind Philosophical Scholarship*, No. XVI., page 349.
2. *Sir David Baxter Philosophical Scholarship*, No. IV., page 346.
3. *John Edward Baxter Scholarship in Classics*, No. V., page 346.
4. *John Edward Baxter Scholarship in Mathematics*, No. V., page 346.
5. *Bruce of Grangehill and Falkland's Mathematical Scholarship*, No. IX., page 347.
6. *Bruce Classical Scholarship*, No. IX., page 347.
7. *Sir David Baxter Mathematical Scholarship*, No. III., page 346.
8. *Charles M'Laren Mathematical Scholarship*, No. XVIII., page 349.

Candidates for Nos. 1 to 8 inclusively must give their names and addresses to the Clerk of Senatus, University, Edinburgh, *on or before* 13th March 1896.[2] The Examinations will begin in the *Examination Hall*, University, at nine o'clock on *Monday*, 30*th March* 1896, and will be continued on following days, at the same hour.

9. *Vans Dunlop Scholarship in Commercial and Political Economy and Mercantile Law*, No. XXV., page 353. The examination will be held at the conclusion of the Graduation examination in Law in October 1895. Names to be entered *on or before* 15th October.[2]

The works on Political Economy recommended to Candidates are :—

Adam Smith's *Wealth of Nations*, Books III., IV., and V.

Nicholson's *Principles of Political Economy*, Vol. I.

Marshall's *Principles of Economics*, Vol. I.

Wieser's *Natural Value* (translated).

Nicholson's *Money and Monetary Problems* (2nd ed.), Part II.

Sidgwick's *Principles of Political Economy*, Book III.

Cunningham's *Growth of English Industry and Commerce*, Vol. I.

Nicholl's *History of the English Poor Law*; and *History of the Scotch Poor Law.*

Bastable's *Public Finance.*

Those on Mercantile Law :—

Smith's *Mercantile Law* (10th ed.).

Abbot on *Shipping* (13th ed.).

Benjamin on *Sales* (3rd or 4th ed.).

10. *Vans Dunlop Scholarship in Hebrew and Oriental* (*Semitic*) *Languages*, No. XXIX., page 354. The competition will take place on *Tuesday*, 31*st March* 1896, and following days, beginning at 10 A.M. each day. Names to be entered *on or before* 13th March.[2]

[1] See footnote, p. 359.

[2] The Senatus reserve power to relax these Regulations in cases where they are satisfied that very special cause has been shown.

The following are the subjects of examination :—

(*a.*) *Hebrew.*—The First Book of Psalms, and the Books of Deuteronomy, Amos, and Micah—to be known critically. Hebrew prose composition.

(*b.*) *Syriac.*—Grammar. The First Three Parts (41 pages) of Nestle's Chrestomathy. The Second Gospel (Peshiṭṭâ Version). Translation into Syriac.

(*c.*) *Arabic.*—Socin's Grammar, Bruennow's Chrestomathy of Arabic Prose Pieces, pp. 1-22, and 45-55. The Ḳor'ân, Sûras iii. and xxviii.-xxx. inclusive. Translation into Arabic.

11. *Vans Dunlop Scholarship in History*, No. XXX., page 354. The competition will take place on the third Monday, Tuesday, and Wednesday of October 1895, beginning at 10 A.M. each day. Names to be entered *on or before* 28th September.[1]

The subjects prescribed are :—

(1.) "History of Great Britain from 1714 to 1820."

(2.) "History of Scotland from 1603 to 1746," both of these years being included.

(3.) "History of Rome from 88 B.C. to 14 A.D."

(4.) "History of France under Louis XIV."

12. *Neil Arnott Scholarship for Experimental Physics*, No. XIX., page 350.

13. *The Mackay Smith Scholarship in Natural Philosophy*, No. XXXV., page 355. The Examination will take place at the same time as the Examination in Natural Philosophy for M.A. with Honours (31st March and 1st April 1896). Names of Candidates to be given in not later than 13th March.[1]

14. *The Scott Scholarship*, No. XXXVI., page 355. Names of candidates to be given in not later than 13th March.[1]

15, 16, 17. *Three Ferguson Scholarships*, No. XX., page 350.

Prizes.[2]

1. The *William Dickson Travelling Fund*, page 358.

2. The *Lord Rector's Prize*, of twenty-five guineas, for the best Essay on "Lord Chatham and William Pitt the Younger: a Comparison."

The Prize is open to Students of the University, and to Graduates of not more than two years' standing. Essays to be lodged with the Secretary of Senatus on or before 1st November,[1] each Essay to be sent anonymously, distinguished by a motto, and accompanied by a sealed

[1] See footnote 2, page 360.

[2] See footnote, page 359.

envelope containing the name, address, and University standing of the Candidate.

3. *Scott and Dunbar Prize*, No. VI., page 344.

4. *Bruce of Grangehill and Falkland's Prize*, No. III., page 343.

5. *Neil Arnott Prize*, No. I., page 343.

6. *Cousin Prize in Fine Art*, No. VII., page 345.

7, 8. *Gray Prizes*, No. IV., page 344, of £20 and £10 for the first and second best Essays on "The Life and Writings of Erasmus." For further information apply to the Rev. Dr Ritchie, Duns.

9. *Dr Muir's Prizes*, No. V., page 344.

10 and 11. *Two Newton Bursaries or Prizes*, No. LXIV., pages 332 and 340.

12. *The Kelland Memorial Prize*, of about £4, 10s., will be awarded by Examination in October. The paper will be on the Higher Geometry for the John Welsh and Heriot Bursaries (set on Monday, 7th October, at 9 A.M.), with such additional questions as may be deemed necessary. Students who made a complete attendance on the Junior Mathematics Class for the first time in the previous Session (1894-95) will alone be eligible to compete for the prize in October next. Names to be given in not later than 20th September.[1]

Bursaries.[2]

See Ordinance of the Universities' Commissioners—Regulations for Bursaries, &c.—which, in all probability, will come into force before September 1895 (*Appendix, page* 17). *Patrons of, and Candidates for, restricted and preferential Bursaries are particularly referred to Sections XV. to XVIII. inclusively, and Section XXI. of that Ordinance.*

(For Time-Table of Examinations, see page 143.)

FOR STUDENTS ENTERING THE FIRST YEAR.

The following Bursaries are awarded on the results of the University Bursary Examinations unless otherwise expressly indicated; and when not otherwise indicated are tenable at the University of Edinburgh only. But the Senatus reserve to themselves the power, under Section XIII. of Ordinance No. 57, to award not more than two of the First Year Bursaries in Arts in respect of exceptional distinction in any one branch of study.

For Bursary and other purposes, where the phrase First-year's Student in Arts or Pure Science is not by Deed of Foundation or otherwise already defined, it shall be held to mean "A Student in Arts or Pure Science who for the first time after passing the Preliminary Examination is attending a Class or Classes qualifying for Graduation."

The Subjects of Examination for the first year Bursaries, Nos. 5 to 14 inclusively in the following list, are the subjects prescribed for the

[1] See footnote 2, page 360.

[2] See footnote, p. 359.

Preliminary Examination, viz. : — English (full marks 100), Latin (100), Greek (100), Mathematics (100), French (50), German (50), Italian (50), and Dynamics (50), with additional papers in English, Latin, Greek, and Mathematics; and Candidates may select not more than five subjects; provided always that no Candidate will be credited with marks in any subject in which he has not obtained twenty-five per cent. of the total marks assigned to that subject. Those who select Latin, Greek, or Mathematics must for the Bursary Competition take the papers on these subjects on the Higher Standard. The Examination Papers are indicated in the Time-Table of Examinations by the figure 1.

Candidates for Bursaries [Nos. 15 to 21 inclusively, and others] which are not awarded by open competition must present themselves for the Preliminary Examination in Arts prescribed by the Regulations for Degrees in Arts, Section III., and no Bursary shall, except as hereinafter provided, be awarded to any Candidate who shall not have passed the Preliminary Examination in Arts (or its equivalent). But it is in the power of the Senatus Academicus, with the approval of the University Court, to admit to a Bursary in Arts not awarded by open competition a Candidate who shall have passed in at least one subject of the Preliminary Examination, on the condition that he shall not retain the Bursary unless he shall have passed in all the subjects not later than the Second Preliminary Examination after the date of his admission as Bursar. When there are more than one eligible Candidate for a restricted or preferential Bursary [Nos. 15 to 21], the Subjects of Examination are :—English (as for Arts and Science Preliminary), Lower Latin, Lower Greek, and Lower Mathematics. The papers are indicated in the Time-Table of Examinations by the figure 3.

Candidates for the MacKinnon Bursary will in addition get Translation of an easy passage from Gaelic to English, Translation of Sentences from English to Gaelic, and Elementary Questions in Gaelic Grammar.

Candidates who intend to present themselves for Examination for Bursaries Nos. 1 to 19 inclusively may obtain schedules for applications at the Matriculation Office, University (Old) Buildings, which must be completed and returned to the Clerk of Senatus *before* 20th September. The Senatus reserve power to relax this Regulation in cases where they are satisfied that very special cause has been shown.

County Clubs, and others who prefer this examination, may, by arranging with the University Court for the cost of Examining, avail themselves of the University Examinations by giving due written intimation of the names of their Candidates at the Matriculation Office not later than 20th September. Those who desire to have their Bursaries inserted in the CALENDAR, under the head of Bursaries open during the year, are particularly requested to give intimation to the Editor before 1st January.

Candidates for Bursaries, unless they are also Candidates for the

Preliminary Examination for the purpose of entering on a Course for Graduation, are not required to pay any fee.

Town Council Bursaries.—Candidates for Bursaries in the gift of the Town Council, many of which are vacant, are referred to the "*City Clerk, Council Chambers,* Edinburgh," to whom early application should be made.

County Club and Private Bursaries.—Candidates for Bursaries instituted by various County Clubs are referred to the respective Secretaries of those Clubs. Information as to Private Bursaries may be obtained from the Patrons or from their Agents.

The names of the successful Candidates, and of others distinguished in the ordinary Bursary competition, will be published, in the order of merit, in the University Calendar, along with the names of the schools from which they come, provided that they have matriculated and enrolled in the necessary classes for 1895-96.

1 and 2. *Two John Welsh Classical Bursaries*, annual value £20 each, tenable for four years. Subjects of examination—Latin, Greek, English.

3 and 4. *Two John Welsh Mathematical Bursaries*, annual value £20 each, tenable for four years. Subjects of examination—Mathematics, especially pure Geometry. (Candidates are recommended to read Macdonald's *Higher Geometry*, Wilson's *Solid Geometry and Conic Sections*, and Casey's *Sequel to Euclid*, as partly indicating the scope of the examination in Geometry. What will be looked for is, not so much exhaustive knowledge of all the more intricate theorems, as a thorough knowledge of such as are more elementary and fundamental in their character, and ability to apply these in fairly straightforward exercises.)

5. *One Whitelaw Bursary*, of about £22, 6s. 4d., tenable for three years.

6, 7, 8. *Three University Endowment Association Bursaries*, of the annual value of £20, tenable for three years. These Bursaries cannot be held with any other Bursary in any Scottish University.

9. *One Tyndall Bruce Bursary*, of the annual value of £20 a-year, tenable for three years.

10. *One Sibbald Bursary*, of the annual value of £30, tenable for three years. Apply to Messrs Mackenzie, Innes & Logan, W.S., 23 Queen Street, Edinburgh, before 15th September.

11. *Thomson Bursary*, £25 a-year, tenable for four years. Apply to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, Edinburgh, before 15th September.

12. *M'Kenzie (Stornoway) Bursary*, of about £27 yearly, tenable for four years. Candidates of the name of M'Kenzie have a preference, provided they have passed the Preliminary Examination in at least two subjects, one of which must be Latin, Greek, or Mathematics on the Higher Standard.

13. *One Mann Bursary*, of about £26, 13s. 4d. a-year, tenable for

three years. Candidates must be sons of residents in the town of Nairn, *i.e.*, one or other of their parents must have resided within the municipal boundaries for at least twelve months at some period prior to the competition. Should there be no qualified Candidate of the first year for this Bursary, a notice will be posted at the College gate soon after the Bursary Competition. Other Preferential Candidates must then lodge their claims within one week after the notice appears on the Board.

14. *Blair Bursary*, of £10 a-year, for three years.

15, 16. *Two Grierson Bursaries*, one of £24 a-year and one of £20 a-year, each tenable for four years—restricted in the first place to natives of the parishes of Crawford and Leadhills.

17. *One Jardine of Thorlieshope Bursary*, of the annual value of £37, 12s. 8d., and tenable for four years. Natives of the rural districts of Roxburghshire and Dumfriesshire to be preferred. The Bursars are required to attend the classes necessary for the Degree in Arts, and to take the Degree at the end of the course. In the event of there being no First Year Students, the Bursary will be thrown open to competition for one year only to second, third, or fourth year Students in succession.

18. *Johnston of Harthope Bursary*, of about £16, 5s. a-year, tenable for four years—restricted in the first place to natives of Moffat and Peebles, and those of the name of Alexander or Johnston preferred.

19. *Two Mackinnon Bursaries*, each of about £18, 15s. a-year (under deduction of Examiner's fees), tenable for three years. Candidates must be natives of the Counties of Argyll, Bute, and Arran, Inverness, Ross, or Sutherland, and must be examined in Gaelic.

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20. *Orkney and Zetland Bursary*, of about £40 per annum, tenable for three years, is open for competition to First Year Students (male or female), natives, or children of parents who are natives, of the County of Orkney and Zetland. The Bursar must attend the classes in the Curriculum with a view to a Degree in Arts. Apply to Messrs Dundas & Wilson, C.S., 16 St Andrew Square, Edinburgh, before 15th September.

21. *M'Diarmid Bursary*, of £10, tenable for three years—restricted to natives of the County of Dumfries and Stewartry of Kirkcudbright. Apply to H. Gordon, Esq., Dumfries.

22. *Renton Bursary*, of about £18, 8s. 6d., tenable for one year, is for a Student pursuing his studies in the classes of Natural Philosophy, Mathematics, Chemistry, and Political Economy, or such of these classes as he may consider proper, and whose circumstances may require such assistance. The Bursary cannot be held by any one under

the age of sixteen or above twenty-one. The Bursar shall cease to hold this Bursary if during the same session he shall be appointed to another Bursary of the annual value of £30 or upwards. The examination is in English and Elementary Mathematics, and will take place on Saturday, November 2, at 10 o'clock. Names of Candidates to be entered at the Matriculation Office, on or before 25th October.

23. The *Donald Fraser Bursary*, of £50, for high merit in the University Class of Natural Philosophy combined with proficiency in Laboratory Work, is awarded annually at the end of the Winter Session.

24-29. *Six George Heriot Bursaries for Boys* will be awarded to Students matriculating at the University for the first time, after having passed the Preliminary Examination for a Curriculum in Arts or Science. Each Bursary is of the annual value of £30 a-year, and may be tenable for three years. Subjects of examination:—(1) Latin; (2) Mathematics; (3) English; (4) Greek; (5) French; (6) German; (7) Italian; and (8) Dynamics. Candidates may select not more than five subjects of examination. The examination papers are indicated by the figure 1 in the Time-Table of Examinations, pages 33 and 34. Applications for Schedules for these Bursaries may be made to the *Governors of George Heriot's Trust*, at the Office of the Treasurer, 20 York Place, Edinburgh, on and after 15th August, and must be returned to him not later than 15th September. Candidates are required to state in their schedule of application the subjects in which they offer themselves for examination.

30, 31, 32. *Three Heriot High School Bursaries.* Subjects, &c., as for Nos. 24-29.

33-40. *Eight George Heriot Bursaries for Women* will be awarded to Students matriculating at the University for the first time, after having passed the Preliminary Examination for a Curriculum in Arts or Science. Each Bursary is of the value of £30 a-year, and may be tenable for three years. The subjects and conditions of the examinations are the same as for the Bursaries for boys. Application to be made in the manner referred to in the previous paragraph. The examination papers are indicated by the figure 1 in the Time-Table.

41, 42. *Two George Heriot Bursaries for Women* studying Medicine, for attendance at any School of Medicine for Women in Edinburgh recognised by the University Court. Each Bursary is of the value of £30 a-year. Application to be made in the manner referred to in the previous paragraph.

43-47. *Five George Heriot Bursaries*, of £30 each, and tenable for one year, at St George's Training College, Edinburgh. Candidates *must pass the Preliminary Examination of the University either in Arts or Science.* They may take as many subjects in addition to those qualifying for the Preliminary Examination as they please; but should they fail to secure 25 per cent. of the marks allotted to a subject the paper will be

cancelled. Application for Schedules for these Bursaries may be made to the Governors of George Heriot's Trust at the Office of the Treasurer, 20 York Place, Edinburgh, on and after 9th June, and must be returned to him not later than 9th July.

48. *One Simson Bursary*, of the annual value of £25, tenable for three years, for Students who, having passed the Preliminary Examination, are entering on the first year of the course in Arts and are studying for the Ministry of the Church of Scotland. See definition of a First-year's Student, at page 362. The Examination will be held at the end of October or beginning of November. For conditions of tenure and subjects of Examination apply to the Rev. Dr Langwill, Currie, or to the Rev. John Patrick, B.D., Greenside, Edinburgh.

49, 50, 51. *Bursaries offered by The Edinburgh Association for the University Education of Women.*

(1) *The Mair Bursary*, of about £30 for two years.

(2) *The Earl of Zetland's Bursary*, about £20 for one year.

(3) The *Victoria Jubilee Bursary*, founded by His Excellency Dr Gunning, £40 for one year.

These Bursaries are offered to women Candidates. The Subjects of Examination are the same as for the University First-year open Bursaries, see page 362. They cannot be held along with any other Bursary or Scholarship whatsoever, and will be awarded to such Candidates as in the opinion of the Executive Committee best fulfil the conditions of the several trusts.

The Elizabeth Hamilton Prize of £5 is offered to the best Woman Student in the Class of Moral Philosophy.

Applications may be sent to the Hon. Secretary of the Association, Miss Louisa Stevenson, 13 Randolph Crescent, Edinburgh.

53, 54, 55. *The Buchanan Society give Four Bursaries* annually in Arts and Science, open for competition to suitable young men of the names of Buchanan, M'Millan, M'Auslan, M'Wattie, and Risk. The Examination Papers are of equal value for full marks in both subjects, and the four competitors who have the highest marks get the Bursaries, provided a satisfactory standard of proficiency is attained. They may therefore be given all in Arts or all in Science. The Arts Bursaries are of the value of £30 annually, tenable for four years, under certain conditions. The Science Bursaries are of the value of £35 annually, tenable for three years, but may be extended to four years, under conditions similar to the Arts ones. For rules and further particulars apply to Geo. Y. Strang Watkins, 186 West George Street, Glasgow, *Secretary*; or to Geo. S. Buchanan, 85 Candleriggs, Glasgow, *Treasurer*.

FOR STUDENTS ENTERING THE SECOND SESSION IN ARTS.[1]

See Time-Table of Examinations.

1. *Tyndall Bruce Bursary*, £35 a-year, for three years.

2. *One Stuart Bursary*, annual value £10, tenable for three years.

The subjects of examination are Latin, Greek, and Mathematics.

The following subjects are prescribed for the examinations in Latin and Greek:—*Latin*—Horace, *Sat.*, ii.; Vergil, *Aen.*, iv., v.; Tacitus, *Hist.* i.; Latin prose composition. *Greek*—Homer, *Odyssey*, v. and vi.; Sophocles, *Ajax;* Thucydides, Bk. viii.; Greek prose composition.

The names of Candidates for Second Year Bursaries must be announced at the *Matriculation Office, University, Edinburgh*, not later than the 20th September 1895.

3 and 4. *Two Spence Bursaries*, each of the annual value of £30 for first year and £40 for second year of tenure, open to Students who have studied in the University of Edinburgh, at the commencement of their second session in a three years' curriculum, and of their third session in a curriculum of four years. The Examination is in Latin, Greek, Mathematics, and English Literature, and will be held at St Andrews in the end of September or beginning of October. Candidates apply to Mr Henry A. Pattullo, Solicitor, 1 Bank Street, Dundee, Factor to the Trust, for particulars.

FOR STUDENTS ENTERING THE THIRD SESSION IN ARTS.[1]

See Time-Table of Examinations.

1. *Horslichill Scott Bursary*, of £38, 8s. 8d. a-year (under deduction of Examiners' fees), for two years.

2. *Harrison Barsary*, £33, 5s. (under deduction of Examiners' fees), for two years.

The subjects of examination for *Third* Session Bursaries are Classics, Mathematics, and Logic with Psychology.

The following subjects are prescribed for the examination in Classics:—Cicero, *Pro Murena;* Horace, *Satires*, i., ii.; Thucydides, Bk. viii.; Sophocles, *Ajax*.

No special books prescribed for Mathematics, or for Logic with Psychology. Candidates should revise the lectures and text-books in these classes

The names of Candidates for third year Bursaries must be announced at the *Matriculation Office, University, Edinburgh*, not later than the 20th September 1895.

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[1] See footnote, page 359.

The attention of all Bursars in the Faculty of Arts is particularly called to the following Regulation :—

"Bursars connected with the Faculty of Arts must annually attend at least two of the Classes necessary for the Degree of Master of Arts, and must present themselves at the Examinations necessary for that Degree.

"Each Bursar must present a Certificate, signed by the Dean, attesting his regular attendance on the proper Classes in the Faculty of Arts, on each occasion on which he applies to the Factor for a payment."

Certificates, in terms of this regulation, will be given to Bursars, by the *Dean of the Faculty of Arts*, after the 13th November ; also at the end of the Session in April. In applying to the Dean for the Certificate in November, Bursars must present to him their Class Cards for the Session, as evidence that they have enrolled in their classes; and at the end of the Session they must present to him certificates from the Professors that they have attended with regularity and made progress in their studies. Payments are made by the Factor for the University, Mr Henry Cook, W.S., 61 North Castle Street, Edinburgh, on and after 14th November for the Martinmas payments, and on and after 18th May for the Whitsunday payments,—between 10 and 3 o'clock.

N.B.—*Bursars, Scholars, and Fellows who desire to resign should at once announce this to the Factor. They must apply to the Factor for the instalments due to them within three months after they have become payable, otherwise they will be regarded as having resigned.*

G. CHRYSTAL, LL.D.,
Dean of the Faculty of Arts, and
Professor of Mathematics.

II.

FACULTY OF SCIENCE.

1895-96.

Dean.

PROFESSOR GEIKIE, D.C.L., LL.D., F.R.S., &c.,

31 *Merchiston Avenue, Edinburgh.*

Faculty of Science.

Students who do not intend to graduate in Science may attend any of the Classes in the Faculty on payment of the Matriculation and Class Fees and without having passed any Preliminary Examination. Attendance on any Class with the view to Graduation in Pure Science will not qualify unless the whole Preliminary Examination has been previously passed. Those who intend to graduate in Engineering or in Agriculture must pass the Preliminary Examination before they present themselves for any part of the First Science Examination, but not necessarily before entering on the Curriculum. The Classes in the Faculty of Science are now open to women, with the exception of a few Classes in which provision has not yet been made for teaching women in the University. See Regulation regarding the attendance by women on Extra Academical Lectures which qualify for Graduation in this University, page 411.

Programme of Classes.

WINTER SESSION, 1895-96.

The Classes will be opened as follows, and will meet daily (Saturdays excepted), unless otherwise stated:—

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.
Junior Mathematics...	15 Oct., 12 o'cl.	Prof. Chrystal	£3 3
Senior Mathematics...	15 Oct., 9 ,,		3 3
Mathematics (Intermediate Honours)	16 Oct., 11 ,,		3 3
Do. (Advanced Honours).....	16 Oct., 10 ,,		3 3
Zoology (Elementary)	15 Oct., 12 ,,	Prof. Ewart	4 4
Practical Zoology (Elementary).	15 Oct., 11 ,,		2 2[1]
Advanced Zoological Laboratory ...	... ...		...
Morphology of Vertebrates (Advanced).....	16 Oct., 2 ,,	J. Beard, D.Sc...	2 2
Comparative Embryology.....	14 Jan., 2 ,,		3 3[2]

[1] Besides charge of 10s. for Laboratory Expenses.
[2] Five Shillings University Entrance Fee.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.
Botany (Advanced) ...	15 Oct., 11 o'cl.	Prof. B. Balfour	£3 3[1]
Prac. Bot. (Advanced)	15 Oct., 11 ,,		2 2
Plant Physiology	13 Jan., 10 ,,	W. G. Smith, B.Sc., Ph.D...	2 2
Natural Philosophy...	15 Oct., 11 ,,	Prof. Tait.....	3 3
Do. (Advanced Honours).	21 Oct., 12 ,,		3 3
Physical Laboratory .	16 Oct., 10 ,,		2 2
Natural Philosophy (Intermediate Honours Course) (*Mon., Wed., Fri.*)	16 Oct., 9 ,,	Cargill G. Knott, D.Sc.....	3 3
Dynamics (Advanced Science Course) (*Mon., Wed., Fri.*)	16 Oct., 10 ,,		3 3
Chemistry	15 Oct., 10 ,,	Prof. Crum Brown	4 4
Practical Chemistry...	2 Dec., 11, 2,,		3 3
Chemistry (Advanced Course)..	3 Dec., 4 ,,		2 2
Practical Astronomy (*Mon., Tues., Wed., Thurs.*).....	22 Oct., 11 ,,	Prof. Copeland..	3 3
Physiology	15 Oct., 10 ,,	Prof. Rutherford	4 4
Practical Physiology..	16 Oct., 1 ,,		3 3
Do. (Advanced)...	21 Oct., 11 ,,		3 3
Experimental Physiology and Histology	... ...	Edmond W. Carlier, M.D.	3 3
Geology & Mineralogy	16 Oct., 4 ,,	Prof. Geikie	4 4
Prac. Class (*Mon., Wed., & Fri.*) ...	21 Oct., 2-4 ,,		2 2
Engineering	1 Nov., 9 ,,	Prof. Armstrong	4 4
Sanitary Engineering and Building Construction	6 Nov., 10 ,,		3 3
Geometrical & Mechanical Drawing	1 Nov., 10 to 2 ,,	W. H. Kerr, M.A., B.Sc....	3 3
Agriculture and Rural Economy..	15 Oct., 9 ,,	Prof. Wallace ..	4 4[2]

1 Besides Garden Fee of Five Shillings.

2 For a second attendance, £3, 3s. ; for Students who have been in attendance for two years, no fee ; perpetual ticket, if taken primarily, £6, 6s.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.
Economics as applied to Agriculture (*The Political Economy Class in Arts till Christmas*)	15 Oct. 5 o'cl.	Prof. Nicholson	£2 2
Agricultural Chemistry	15 Oct., 3 ,,	A. P. Aitken, D.Sc.	4 4
Forestry	15 Oct., 10 ,,	Col. Bailey, R.E.	3 3[1]
Agricultural Entomology (Twenty Lectures)	7 Jan., 2 ,,	W. Fream, LL.D., B.Sc. (Lond.)	2 2[1,2]

[1] Five Shillings University Entrance Fee for Non-Matriculated Students, unless taken with a view to Graduation in Agriculture.
[2] Free to all present and past Students of the Agriculture Class.

SUMMER SESSION, 1896.

The Classes will be opened as follows. They will meet daily (Saturdays excepted), unless otherwise stated.

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.
Senior Mathematics (First Graduation Half-Course)	5 May, 11 o'cl.	Chas. Tweedie, M.A., B.Sc.	£2 2
Senior Mathematics (Second Graduation Half-Course)	5 May, 12 ,,		2 2
Honours Mathematics (Half-Graduation Course)	10 May, 12 ,,		2 2
Physics (*mainly for Students of Medicine*)	5 May, 12 ,,	Prof. Tait	3 3
Physical Laboratory	5 May, 10 ,,	Prof. Tait and Assistant	2 2
Applied Mathematics (Electricity and Magnetism)	5 May, 9 ,,	C. G. Knott, D.Sc.	2 2
Advanced Experimental Physics	5 May, 10 ,,	W. Peddie, D.Sc.	2 2
Chemistry (Organic).	5 May, 1 ,,	Prof. Crum Brown	£2 2
Do. (Practical)	5 May, 2 ,,		3 3

Classes.	Days of Opening and Hours of Attendance.	Professors and Lecturers.	Class Fees.
Chemical Theory.....	5 May, 10 o'cl.	Leonard Dobbin, Ph.D.	£1 1
Mineralogy and Crystallography	5 May, 9 ,,	Hugh Marshall, D.Sc.	2 2
Practical Astronomy (Advanced) (*Tues. & Fri.*).....	5 May, ,,	Prof. Copeland....	2 2
Anthropology[1] (*Tues., Wed., & Fri.*).	5 May, 2 ,,	Prof. Sir Wm. Turner	2 2[1]
Practical Physiology...	5 May, 3 ,,	Prof. Rutherford..	3 3
Do. (Advanced Class)	*In Winter only.*		3 3
Geology (*Mon., Wed., Fri.*).....	6 May, 4 o'cl.	Prof. Geikie,.....	3 3
Field Demonstrations on *Saturdays.*			
Petrology.....	6 May, 10-12 ,,	J. S. Flett, M.A., B.Sc., M.B., C.M.	2 2
Zoology (Elementary).	5 May, 1 ,,	John Beard, D.Sc.	4 4
Do. (Elementary Practical)	5 May,[4]		2 2[2]
Invertebrate Zoology ..	5 May, 3 ,,		2 2
Advanced Zoology..... (Embracing a Course on Comparative Morphology of the Invertebrata and an Advanced Laboratory Course)	5 May,[4]	Prof. Ewart.....	3 3[2]
Natural History Laboratory.....	5 May, 2 ,,		6 6
Botany	5 May, 8 ,,	Prof. Bayley Balfour.....	4 4[3]
Practical Botany..... Field Demonstrations on *Saturdays.*	5 May, 9 ,,		2 2
Plant Physiology	8 May, 2 ,,	W. G. Smith, B.Sc., Ph.D.	2 2
Engineering Field-Work (Surveying, Levelling, &c.)[5].....	... ...	Prof. Armstrong...	3 3

[1] When taken with Practical Anatomy, £1, 1s.
[2] Besides charge of 10s. for Laboratory Expenses.
[3] Besides Garden Fee of 5s.
[4] At hours to be arranged.
[5] Given in alternate Summers. Next Course in Summer 1897.

The following means are afforded for Practical Instruction:—

LABORATORIES.

The Physical Laboratory, established with the view of affording Students a practical knowledge of the construction and use of physical apparatus, and the mode of conducting experimental inquiries, is open daily from 10 to 3, under the superintendence of Professor Tait.

Geological and Petrological Laboratory, for practical instruction in the study of Minerals, Rocks, and Fossils, and the methods of plotting and drawing geological maps and sections, is open on Monday, Wednesday, and Friday from 2 to 4, under the superintendence of Professor Geikie.

Engineering Drawing Class Room, open daily during the Winter Session, from 10 A.M. to 2 P.M., for practical instruction in drawing and drawing office routine.

The Engineering (Fulton) Laboratory, open on fixed days during the Winter Session, for the practical instruction of Students in the processes employed by the Engineer in the Experimental Determination of the Physical and Economical Constants of Materials, Machines, and Prime Movers, and in the Practical Applications of Electricity.[1]

Practical Instruction in Office and Field-work, daily, in connection with the Summer Course of Lectures on Surveying, Levelling, &c., from 11 A.M. to 4 P.M. each day.

The Agriculture Department in the Museum of Science and Art is open daily to Students attending the Agriculture Class. Excursions to farms are made on Saturdays by Members of the Agriculture Class, and demonstrations are given from time to time in the Agriculture Laboratory. The leading agricultural newspapers are left for the use of Students in the Agriculture Lecture Room.

The Royal Observatory is open to Students of Practical Astronomy on Friday evening, from 8 P.M.

The Botanical Laboratory at the Royal Botanic Garden is open daily for the practical study of plants and for research, under the superintendence of the Professor, assisted by James Adam Terras, B.Sc., and J. H. Burrage, B.A.

Physiological Laboratory, for the prosecution of Physiological Research, and for the study of Practical Physiology, open daily, under the superintendence of the Professor, assisted by E. W. Carlier, M.D., C.M., B.Sc., and Gustav Mann, M.D., C.M.

The Chemical Laboratories (distinct from the Practical Chemistry Room), completed in 1885, contain accommodation for forty Students. The Laboratories, which are fitted with all necessary apparatus for chemical analysis and research, are open daily, under the superinten-

[1] Fees—Winter Session, £10, 10s.; Summer Session, £6, 6s.

dence of the Professor, assisted by Leonard Dobbin, Ph.D. ; Hugh Marshall, D.Sc. ; and A. Forbes Watson, B.Sc.[1]

Dissecting Rooms, open daily under the superintendence of Professor Sir William Turner, assisted by David Hepburn, M.D. ; James Musgrove, M.D. ; J. B. Yeoman, M.B., C.M. ; and other assistants. Opens 1st October 1895 and 5th May 1896.

Natural History Laboratories, for research and for study of the structure and development of Invertebrate and Vertebrate forms, open daily, under the superintendence of the Professor, assisted by J. Beard, D.Sc.

Public Health Laboratory, for Hygienic investigation, comprises three departments, viz. : a Chemical, a Bacteriological, and a Meteorological Department, open daily, under the superintendence of the Professor, assisted by Charles Hunter Stewart, M.B., C.M., D.Sc., and James Buchanan Young, M.B., C.M., D.Sc. Opens 1st October 1895 and 5th May 1896.[2]

MATRICULATION.

Students are required to take out their Matriculation and Class Tickets for each course of Lectures which they propose to attend, not later than fifteen days after the commencement of the course. Matriculation consists in paying during each year of study an entrance fee to the University, and in inscribing the name in the Students' Album.

Candidates for Degrees, not Matriculated Students of the University, availing themselves of the permission to attend the Classes of Extra-Academical Teachers in Edinburgh, pay a fee equivalent to the Matriculation fee.

The Matriculation Fees, &c., are—

For the Academical Year (1st October to 1st October), .	£1 1 0
Extra-Academic fee (1st October to 1st October), . .	1 1 0
For the Summer Session only (1st May to 30th September inclusively), ...	0 10 6
(Candidates entering for Graduation Examinations or for Graduation, pay £1, 1s.)	
University entrance-fee in lieu of Matriculation for each of certain additional Courses (see Class Lists), . . .	0 5 0

[1] Fees for Chemical Laboratory.—*Whole-day*—Winter Session, £10, 10s., Oct.-Dec., Jan.-March : or Summer Session, £5, 5s. *Half-day*—Winter Session, £6, 6s., Oct.-Dec., Jan.-March ; or Summer Session, £3. 3s. Preference will be given to Students in the above order. Students who are not Matriculated may attend the Chemical Laboratory on payment of the entrance fee of 5s. in addition to the Laboratory fees.

[2] Fees—Winter Session, £10, 10s.; Summer Session, £6, 6s.

CLASS SESSIONS.

There are Two Sessions in each year, viz. :—

I. The Winter Session, which opens on the 15th of October 1895, and closes 27th March 1896. Practical Anatomy, and Public Health Laboratory work begin on the 1st of October 1895.

The Classes will meet for the last time before the Christmas Vacation on Friday, 20th December 1895, and will re-assemble on Tuesday, 7th January 1896.

II. The Summer Session, which opens on the 5th of May, and closes on the 17th of July 1896.

The Graduation Ceremonials take place on 11th April and 1st August 1896.

Graduation in Science.

COURSES OF LECTURES, 1895-1896.

I.—PURE SCIENCE.

I. MATHEMATICS.

PROFESSOR CHRYSTAL.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

For Synopses of Lectures, see under Faculty of Arts.

II. ZOOLOGY, including COMPARATIVE ANATOMY.

PROFESSOR EWART.

For Synopses of Lectures on Zoology and of Courses on Practical Zoology, see under Faculty of Medicine.

COMPARATIVE EMBRYOLOGY.

J. BEARD, D.Sc., *Lecturer.*

The Course consists of Lectures and Practical Work.

Lectures.—In the Lectures the following subjects will be dealt with:—The maturation, &c., of the egg and spermatozoan, the modes of formation of the germinal layers in a series of selected types, an account of the development of Scyllium or Raja, Amphioxus and Rana as a basis for general Vertebrate Embryology, the organogeny of the chief systems of organs in the Vertebrata, the evolution and comparative development of the placenta. A few lectures will be given on the general principles and theory of Comparative Embryology, the recapitulation theory, and the nature of larval forms.

Practical Work.—Each member of the Class will have an opportunity of preparing for himself and studying a series of preparations to illustrate the development of Acanthias, Salmo, Rana, Gallus, and Lepus. In addition, an extensive series of preparations of Raja, Scyllium, Torpedo, and Lacerta, &c.,

and of certain Invertebrate forms will be available for reference and study.

In the Laboratory Work members of the Class may, if they choose, confine their studies to one particular type or to some selected branch of the subject, such as Mammalian Embryology.

Books for reference.—Marshall's "Vertebrate Embryology"; Hertwig's "Embryology of Man and the Higher Vertebrates"; Korschelt und Heider's "Vergleichende Embryologie der Wirbellosenthieren"; Willey's "Amphioxus"; and for recent advances, "Ergebnisse der Entwickelungs Geschichte."

MORPHOLOGY OF THE VERTEBRATA.

A Course of twenty-five Lectures devoted to the Morphology of the Vertebrata, the nervous system and its sense organs, electrical and luminous organs and the genito-urinary system receiving particular attention.

As far as time permits the present position of the question as to the morphological nature of the vertebrate head and skeleton will be discussed.

III. BOTANY.

PROFESSOR BAYLEY BALFOUR.

For Synopsis of Lectures on Botany, see under Faculty of Medicine.

PLANT PHYSIOLOGY (ADVANCED).

W. G. SMITH, B.Sc., PH.D., *Lecturer.*

The Course will be given at the Royal Botanic Garden on Tuesdays and Fridays, at 2 P.M., during the Summer Session, and will consist of Lectures and Practical Demonstrations, supplementary to the Lectures of the Professor of Botany. The Processes in Plant Nutrition, Assimilation, and Respiration, the Irritability and Movements of Plant Organs, and the Physiology of the Reproductive Process in Plants will be treated, as far as possible, in a series of Demonstrations, in which the Students will be expected to take part.

IV. NATURAL PHILOSOPHY.

PROFESSOR TAIT.

C. G. KNOTT, D.Sc., *Lecturer on Applied Mathematics.*

ADVANCED EXPERIMENTAL PHYSICS.

WILLIAM PEDDIE, D.Sc., *Lecturer.*

For Synopses of Lectures on Natural Philosophy, &c., see under Faculty of Arts.

V. CHEMISTRY.

PROFESSOR CRUM BROWN.

For Synopses of Courses, see under Faculty of Medicine.

ORGANIC CHEMISTRY.

This Class meets daily during the Summer Session at 1 P.M.

ADVANCED CHEMISTRY.

Course of twenty-five Lectures to commence after Christmas. Subject for 1895-96, "Solution and Electrolysis."

CHEMICAL THEORY (ADVANCED).

LEONARD DOBBIN, PH.D., *Lecturer.*

Fee, £1, 1s. In Chemistry Tutorial Class Room.

The subjects to be taken up will vary from year to year. They are to be treated historically, and will embrace the more important chemical theories which are at present productive or which have been superseded. The Class will meet on Mondays and Fridays during the Summer Session. The Special Subjects for Summer 1896 will be afterwards announced.

MINERALOGY AND CRYSTALLOGRAPHY (ADVANCED).

HUGH MARSHALL, D.Sc., *Lecturer.*

Daily, at 9 A.M., beginning Tuesday, 5th May. Fee, £2, 2s. In Chemistry Tutorial Class Room.

The earlier part of the Course will be devoted to Physical

Crystallography generally, including the optical and other properties of crystalline substances and the geometrical properties of crystals. The latter section will deal specially with minerals, treating those parts of Systematic Mineralogy not included in the earlier section of the Course, and the Descriptive Mineralogy of those minerals which are of most importance from a Geological or a Chemical point of view. Some of the meetings will be devoted to Elementary Practical Work and Demonstrations.

VI. ASTRONOMY.

PROFESSOR COPELAND.

Lectures on Practical Astronomy will be delivered on Mondays, Tuesdays, Wednesdays, and Thursdays. Instruction in the use of portable and fixed Astronomical Instruments will be given at the Royal Observatory on Blackford Hill on Fridays, beginning at 8 P.M. The Lectures consist of two Courses, viz.: (1) The Theory and Use of Astronomical Instruments, together with as much General Astronomy as is requisite to guide the Student in making observations in the field as well as in an observatory; (2) The Utilization of Observations of Comets, &c., in the Computation of Orbits and Ephemerides.

An Advanced Practical Course, consisting of 30 meetings of two hours each, may be held in Summer.

PRACTICAL ASTRONOMY (ADVANCED SUMMER CLASS).

This Class will only be held in the event of a sufficient number of Students presenting themselves. It will meet at the Royal Observatory, Blackford Hill, on Tuesdays and Fridays during the Summer Session. Evening hours will also be arranged, to suit the progress of the work.

VII. HUMAN ANATOMY, including ANTHROPOLOGY.

PROFESSOR SIR WILLIAM TURNER.

For full Synopsis of Lectures on Anatomy, see under Faculty of Medicine.

ANTHROPOLOGY.

In the event of a sufficient number of Students expressing their intention of selecting Human Anatomy, including Anthropology, as a subject for the Degree of Bachelor of Science, the Professor of Anatomy will be prepared to deliver, during the Summer Session, a course of twenty-five Lectures on Physical Anthropology. Fee, £2, 2s. To Students who take the Summer Course of Practical Anatomy, the fee for this Class of Anthropology is £1, 1s.

VIII. PHYSIOLOGY.

PROFESSOR RUTHERFORD.

For Synopsis of Lectures, see under Faculty of Medicine.

ADVANCED PRACTICAL PHYSIOLOGY.

E. W. CARLIER, M.D., B.Sc., *Lecturer.*

This course is devoted to Experimental and Chemical Physiology and Histology of a more advanced nature than that of the ordinary course of Practical Physiology.

1. The Experimental part embraces the Experimental Physiology of muscle and nerve; the heart and circulation; respiration; central nervous system; and organs of sense and voice.

2. The Chemical part embraces the physiological chemistry of the blood, including the spectroscopic study of haemoglobin and its derivatives; bile; digestive fluids and their actions; milk and other foods; muscle.

3. The Histological part embraces the advanced study of the structure of various tissues and organs as revealed by recent methods of research of a refined character.

This course is more especially adapted for those who are preparing for examinations in Natural Science and Honours Examinations in Physiology at Universities and Colleges, as

well as for those who may afterwards desire to prosecute Physiological Research.

The Class meets for two hours twice a week in the Winter Session, beginning in October and extending to March. Fee, £3, 3s.

(This course is not held in Summer.)

IX. GEOLOGY, including MINERALOGY.

PROFESSOR JAMES GEIKIE.

Winter Course.

I. CLASS OF GEOLOGY AND MINERALOGY.—This Class meets daily, at 4 o'clock. The Course embraces a system of instruction in the following subjects :—

1. *The History of Geology*—An outline of the growth of the science from the time of the early cosmogonies downwards.

2. *Dynamical Geology*—A discussion of the nature and causes of geological changes effected on the surface and within the interior of the earth.

3. *Mineralogy*—An account of the physical and chemical characters of minerals, and a description of some of the more important and typical species in the various mineral groups.

4. *Petrology*—A description of the various families of rocks.

5. *Structural Geology*—A description of the geological structure and relations of rock-masses to each other.

6. *Palæontological Geology*—An account of the nature and use of fossils in geological inquiry.

7. *Historical Geology*—The history of the successive geological periods.

8. *Physiographical Geology*—An inquiry into the origin of the present outlines of the earth's surface.

Text-Books—"Outlines of Geology," by the Professor (*Stanford*); Hatch's "Mineralogy" (*Whittaker*); Hatch's "Petrology" (*Sonnenschein*). More detailed works of reference, most of which are in the College Reading-Room, are recommended for each branch of the lectures.

II. Class of Practical Mineralogy and Geology.—This Class meets for two hours (2 to 4), on Mondays, Wednesdays and Fridays, under the superintendence of Professor Geikie.

III. Field Demonstrations.—Short excursions are made on Saturdays to places of geological interest in the neighbourhood of Edinburgh, when the Class Lectures are illustrated by demonstrations in the field, and practical instruction is given in Geological Surveying. At the close of the Session (usually in the last week of April) an excursion, extending over a week or thereabout, may be made for the purpose of examining the structure of a more distant district.

These Field Demonstrations are open to Students attending either the Class Lectures or the Practical Class.

Adjoining the Geology Class-room there is a small Museum exhibiting the characters of minerals and rocks, and the typical fossils of the different geological systems.

Summer Course.

The following subjects are dealt with in this Course :—

1. *Petrology.*—(The lectures are illustrated by demonstrations in the Laboratory and the Class Museum.)

2. *Palæontological Geology.*—(A collection of the typical fossils of the different formations occurring in Britain will be found in the Class Museum.)

3. *Structural Geology.*—Under this head *Dynamical Geology* is discussed in more or less detail.

4. *Geological Surveying.*

5. *Economic Geology: application of Geology to Mining, Engineering, Agriculture, Public Health, &c.*

6. *Physiographical Geology.*

Structural and *Field Geology* form the principal portion of this Course, but no previous knowledge of Geology is required on the part of the student—the elementary principles upon which the science is based being set forth both in the lecture-room and the field. The Class meets on Mondays,

Wednesdays, and Fridays at 4 o'clock, and a series of practical lessons on the study of rocks will be given at the commencement of the Session on Tuesdays and Thursdays at the same hour. The Saturdays are devoted to field demonstrations, when the mode of geological mapping and section-drawing is explained and illustrated.

PETROLOGY.

J. S. FLETT, M.A., B.Sc., M.B., C.M., *Lecturer.*

The Course will consist of Lectures and Practical Work, and will meet on Mondays, Wednesdays, and Fridays, from 10 to 12, during the Summer Session.

II.—APPLIED SCIENCE.

I.—Engineering.

I. MATHEMATICS.

PROFESSOR CHRYSTAL.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

For Synopses of Lectures, see under Faculty of Arts.

II. NATURAL PHILOSOPHY.

PROFESSOR TAIT.

For Synopsis of Lectures on Natural Philosophy, &c., see under Faculty of Arts.

III. CHEMISTRY.

PROFESSOR CRUM BROWN.

For Synopsis of Courses, see under Faculty of Medicine.

IV. DRAWING AND MENSURATION.

W. H. KERR, M.A., B.Sc., *Lecturer.*

Class of Drawing (Geometrical, Engineering, and Architectural), and of Mensuration.—Students can attend this Class at any time between the hours of 10 A.M. and 2 P.M. each day.

All Students are recommended to take the Classes in Engineering and Drawing together.

The Class in Drawing may also be attended with advantage by those who propose in subsequent years to attend the Class in Engineering, as it is of great importance that Students should be able to readily understand mechanical diagrams, and to apply the graphic methods of calculation frequently employed by Engineers.

It will be found useful also to those who propose to become architects or surveyors.

A course of instruction will be specially arranged to meet the requirements for the Degree of B.Sc. in Public Health.

SYNOPSES.

1. *Ordinary Class.*

The work of this Class is arranged so as to form a two-years' Course, and will consist of Lectures and Practical Instruction in Drawing.

These Courses are described as "Junior" and "Senior," and, although it is not imperative, it is desirable that they should be taken in their natural order.

Junior Course:—

Plane Geometrical Drawing.
Construction of Curves.
Design of Toothed Wheels and Gearing.
Graphic Methods of determining Stress in Structures.
Loci of Points in Link-work.
Diagrams of Velocity, Acceleration, and Energy.

Senior Course:—

Solid Geometry.
Interpenetration and Development of Surfaces and Solids.
Isometric Projection—Perspective.
Structural and Machine Drawing.
Rough Sketching of Machines, &c., and the Preparation therefrom of Working Drawings.

Design of Structures in Masonry, Timber, Steel, and Iron. Roofs, Bridges, Skew Arches, &c.
General Machine Design.

2. *Special Class for Public Health Students.*

The Course of instruction will include the following subjects :—

Scales and their Uses.
Estimation of Areas and Volumes.
Elements of Plane and Solid Geometry, and their application to the making of Structural Drawings from Models and Figured Sketches.

V. ENGINEERING.

PROFESSOR ARMSTRONG.

Winter Session.

I. CLASS OF ENGINEERING.—The object of the Course will be to show the practical application of Science to some branches of Engineering. The Series of Lectures, combined with Laboratory instruction, will form a Two Years' Course, so arranged that Students can enter the Class at the beginning of either year. The following are the subdivisions of the subject-matter of the complete Course, a part only of each subdivision being dealt with each year :—

1. Applied Mechanics ; 2. One Branch of Civil Engineering ; 3. One Branch of Mechanical Engineering ; 4. A Series of Examples of the Application of Machinery to Manufacturing Purposes ; 5. Laboratory instruction in connection with one or other of the foregoing subdivisions.

Synopsis of the Course for the present Session :—

A.

1. Hydrostatics and Hydrokinetics.
2. Rivers and Canals, Harbours, Docks, and Breakwaters.
3. Water-works for the supply of towns.
4. Drainage, Ventilation, Draining, and other sanitary requirements.

5. Water-wheels, Turbines, and Pumps.
6. Efficiency of various modes of transmitting power.
7. Theory of Heat Engines.

B.

8. The Steam Engine and Steam Engine Testing, with Laboratory Demonstrations, under the superintendence of the Professor.

Four Examinations are held during the Session; and each week, unless there be an Examination, a problem paper is set to be worked at home. The questions proposed are such as are met with in the practice of Engineering; and the answers being returned to the Students, annotated and corrected, form a body of Examples for subsequent reference.

There is also a Tutorial Class, held weekly, at which the questions set in the problem paper of the previous week are discussed and explained.

Engineering Works and Factories are, from time to time, visited by the Class, under the direction of the Professor.

The attention of Students proposing to follow the foregoing course of instruction is specially directed to the following Class (II.), one attendance at which, though optional, is strongly recommended.

II. Additional Class. — A short preliminary course of instruction in General Mechanics is given, *without additional fee*, for the benefit of those who are entering the Class of Systematic Engineering, with an imperfect knowledge of Mechanical principles. The Class, which will be taught by an assistant, will meet five days a week for about a month, commencing on the same day in October as that on which the General Science Classes open.

III. A Course of Instruction (Theoretical and Practical) in Sanitary Engineering, and Building Construction, designed to meet the requirements of Candidates for Degrees in Public Health. The Course consists of about forty Lectures.

IV. The Fulton Engineering Laboratory.—In this Laboratory Students receive practical instruction in the processes employed by the Engineer in the experimental determination of the physical and economical constants of materials, machines, and prime movers, and in the practical application of electricity.

Summer Session.

V. Engineering Field-Work.—A course of Practical Instruction in Surveying, Levelling, Setting Out, and Calculation of Quantities, is given, in alternate years, during the Summer Session.

The course consists of lectures, and of practical work, as undertaken in the field and in the office, and occupies the whole of each day for about three weeks. The number of hours during which instruction is given is thus made to correspond to an ordinary Course extending over a much longer period. The Class will be next held in 1897.

Course of Study.

The following course of study is recommended for those Students who are preparing for the Degree of B.Sc. in Engineering :—

1st Year.—Mathematics (Intermediate Honours Class [Winter] or Advanced Class [Summer]), Geometrical Drawing and Graphics, Chemistry (or Natural Philosophy), Engineering Field-Work (Summer Session).

2d Year.—Engineering and Natural Philosophy (or Chemistry), Laboratory (Chemical or Physical), Engineering, Engineering and Mechanical Drawing.

3d Year.—Natural Philosophy (Advanced Class), Engineering, Optional Course.

In some cases a modification of the foregoing may be found desirable.

The Engineering Field-Work Class may be taken during whichever of the Summers it is held.

For particulars of Scholarships, &c., tenable in connection with the Department of Engineering, see SCHOLARSHIPS (Arts, &c.).

VI. DYNAMICS.

C. G. KNOTT, D.Sc., *Lecturer.*

A complete Advanced Science Course on Dynamics, of at least fifty Lectures, will be given by the Lecturer on Applied Mathematics. This course is adapted for the needs of Engineering Students. In the treatment of the subject practical applications and, in particular, graphical methods of solution will receive attention ; while the simpler processes only of the differential and integral calculus will be made use of. The Course will include the Kinematics, Kinetics, and Statics, of particles, rigid solids, flexible cords, and perfect fluids ; and the more elementary parts of Strains and Elasticity.

Books recommended.—The simpler sections of the Article *Mechanics* in the last edition of the *Encyc. Brit.* ; Rankine's *Applied Mechanics.*

VII. GEOLOGY AND MINERALOGY.

PROFESSOR JAMES GEIKIE.

For Synopsis of Lectures, see Summer Course under Pure Science.

II.—PUBLIC HEALTH.

I. LABORATORY WORK.

PROFESSOR SIR DOUGLAS MACLAGAN.

See Schedule, page 424.

II. CLINICAL INSTRUCTION regarding Fevers and Infectious Diseases during three months in a recognised Hospital.

III. INSTRUCTION IN MENSURATION AND DRAWING.—Three months under a recognised Teacher.

See Special Course by Professor Armstrong in Sanitary Engineering and Drawing, page 390.

IV. PHYSICS.

PROFESSOR TAIT.

CARGILL G. KNOTT, D.Sc., *Lecturer.*

For Synopses, see under Faculties of Arts and Medicine.

V. GEOLOGY.

PROFESSOR GEIKIE.

For Synopsis of Courses, see under Pure Science.

VI. PUBLIC HEALTH.

(*a*) PRACTICAL SANITATION, SANITATION, AND HYGIENE.

PROFESSOR SIR DOUGLAS MACLAGAN.

For Synopsis of Courses, see under Faculty of Medicine.

(*b*) SANITARY ENGINEERING, BUILDING CONSTRUCTON, ETC.

PROFESSOR ARMSTRONG.

Special Course, see under Engineering.

III.—AGRICULTURE.

I*a*. MATHEMATICS.

PROFESSOR CHRYSTAL.

CHARLES TWEEDIE, M.A., B.Sc., *Lecturer.*

The Senior Class as for Graduation in Arts. For Synopses of Lectures, see under Faculty of Arts.

I*b*. ZOOLOGY.

PROFESSOR EWART.

For Synopsis of Lectures, see under Faculty of Medicine.

I*c*. BOTANY.

PROFESSOR BALFOUR.

For Synopsis of Lectures, see under Faculty of Medicine.

II. NATURAL PHILOSOPHY.

PROFESSOR TAIT.

For Synopsis of Lectures, see under Faculty of Arts.

III. CHEMISTRY.

PROFESSOR CRUM BROWN.

For Synopsis of Lectures, see under Faculty of Medicine.

IV. AGRICULTURE AND RURAL ECONOMY.

PROFESSOR WALLACE.

1. *Definition of Agriculture.*—Aid given by the Allied Sciences.

2. *Surface Geology.*—Formation and Classification of Soils—their Physical and Chemical Properties. Importance of Organic Nitrogen. Indications of good or bad Soils—the different Methods of Management and Improvement.

3. *Drainage.*—Its Practice and Advantages—Irrigation—Wet-Warping—Mixing or Top-Dressing—Claying—Marling—Chalking—Liming—Paring and Burning—Clay-Burning. The Effect on Soils of Cultivation and the Growth of Plants.

4. *Implements and Machines of the Farm.*—The Importance of their proper Construction and careful Management.

5. *Steam Cultivation.*—Its Advantages and Disadvantages.

6. *The Motive Powers Employed on the Farm.*—1st, Man; 2nd, Horse; 3rd, The Mechanical Powers (Water, Wind, and Steam)—their Comparative Values and Advantages.

7. *Farm Servants.*—Their Labour and Wages—Day-work and Piece-work. Detailed and total costs of Horse and Hand Labour on different Classes of Farms.

8. *The Importance of Rotations.*—Different Rotations and reasons why they are adopted—Systems of Farming.

9. *Our Farm Crops* (including Grain, Root, Forage, and Hay Crops).—Their Selection and Cultivation. Insect Injuries and Diseases, and the best Means of Prevention.

10. *Identification of Grasses and other Valuable Pasture Plants.*—Character and Habits of those of importance—Detection of Adulterations of Seeds—Regulations necessary to protect the Farmer in buying Seeds.

11. *The Management of Permanent Pasture.*—Proper Methods of making new Pasture—its After-treatment.

12. *Weeds in Pastures* and Means of Destroying them.

13. *Silage and the System of Ensilage.*—Its Advantages, &c. —Its Suitability and Unsuitability according to Locality.

14. *Manures.*—Farm-yard Manure—its proper Mixing, Storing, and Application—its great advantage as a General Manure. Special Manures and so-called Artificials—their Uses, Abuses, and Adulterations—the proper Times and Methods of their Application. The Value of Liquid Manure and Town Sewage, and how to utilise them.

15. *Buildings and Fences.* — The proper Construction of Fences—the General Arrangement of Farm-Buildings—the best Flooring and Inside Plans and Dimensions of Byres, Cattle-Sheds, Stables, &c. — Covered Yards — Ventilation — Drainage.

16. *Live-Stock, embracing Cattle, Pigs, Horses, Sheep, Poultry.*—The various Breeds of each, and suitability of some to Local Conditions—"The Principles of Breeding." Feeding and Management—Cost of Feeding—Proper Mixtures of Food to use. Cost of the Production of a Stone of Beef, Mutton, and Pork, showing the Amount of Profit in each case.

17. *Dairying in all its Branches*, including the suitability or otherwise of surrounding Conditions—the proper Classes of Dairy Stock to keep, and their Management—the Treatment of Milk, and its Sale, or its Manufacture into Cheese, Butter, &c.

18. *Feeding Stuffs.*—Suitability of the Common Food Substances to the different Classes of Farm Stock—the Purchase, Storing, and Administration of the same—their Manurial Residues.

Text-Books.—Wallace's "Farm Live Stock of Great Britain," M'Connell's "Note-Book of Agricultural Facts and Figures," Fream's "Elements of Agriculture," "Rothamsted Experiments," and "Soils and their Properties."

Students are requested to consult with the Professor of Agriculture at the beginning of the Session as to the plan and arrangement of their work.

In connection with the Class there are, in addition to the Medal and First and Second Class Certificates, the Steven

Scholarship of about £75 and the Vans Dunlop Scholarship of £300. Particulars will be found under *Scholarships* in the Faculty of Arts. The Highland and Agricultural Society of Scotland gives £10 to be spent on Books for Class Prizes.

Periodical Excursions will be made to some of the best Farms in the Lothians. A Medal may be given to the student who writes the best report of the same.

V. AGRICULTURAL CHEMISTRY.

A. PEEBLES AITKEN, D.Sc., *Lecturer.*

The Course of instruction in the Chemistry of Agriculture comprises Lectures, Demonstrations, and Laboratory work.

The subjects included in the Course are :—

1. *The Atmosphere.*—The relation of its constituents to plant life, rain, dew, fog, and hoar frost, their causes and effects.

2. *Soils.* — Their origin and formation — the physical and chemical processes included in the term "weathering"—the inorganic and organic constituents of soils—the essential elements of fertility—the work of living organisms in the soil—the decay and putrefaction of vegetable matter—the formation of humus—nitrification—the relation of soils to air and moisture—capillarity—the absorption of salts by soils—lysimetry—the circumstances affecting the composition of drainage water—the amelioration of soils by physical and chemical means—the classification, investigation, and analysis of soils.

3. *Plants.*—The mineral and organic constituents of plants—their transformations and translocations during the life of plants from germination to maturity—respiration, transpiration, and assimilation—plant nutrition, and the specific effects of nutritive substances upon the growth and development of plants—water culture and other methods of investigating plant nutrition—meteorological conditions affecting the health and vigour of plants—the sources whence plants derive their nitrogenous constituents—symbiosis—the analysis of vegetable substances.

4. *Manures.*—Their classification, composition, and characteristics—their specific action and suitability for different soils, climates, and crops—their economic use and the principles re-

gulating their application—the methods of conducting manurial experiments—the analysis and investigation of manures—the valuation of manures, and of unexhausted fertility.

5. *Crops.*—Their composition and classification—fodder crops, their relative value as food—the external conditions affecting their nutritive value, preservation, and digestibility—the theory of rotations—crop residues and their relation to the fertility of the soil.

6. *Animal Nutrition.*—The chief constituents of the animal body—respiration—digestion—the influence of diet on the growth and health of animals—the laws of flesh and fat production, and the relation of food to work—the nutrient ratio as a guide to feeding—animal waste—the relation of food to manure—the external conditions affecting the health and growth of animals—the preparation of fodder—the analysis and investigation of feeding stuffs.

7. *Dairy Produce.*—The composition of milk—its physical characters—the diseases and sophistications to which it is liable—the characteristics of its ingredients—its analysis—butter and cheese—their composition, sophistication, and analysis—the scientific aspects of dairy management.

VI. GEOLOGY.

PROFESSOR GEIKIE.

For Synopsis of Lectures, see Summer Course under Pure Science, or the Winter Course as for Arts Students.

VII. VETERINARY HYGIENE.

Lectures of recognised teachers of the subject.

VIII. AGRICULTURAL ENTOMOLOGY.

Course of twenty Lectures and Laboratory Demonstrations.

W. FREAM, LL.D., B.Sc. LOND., F.L.S., F.G.S., ETC., *Steven Lecturer.*

(*Free to Present and Past Students of the Agriculture Class.*)

The position of Insects in the Animal Kingdom.

The morphology and physiology of Insects, particularly in so

far as a knowledge of these can be turned to useful account in baffling the attacks of insect pests. The structural modifications of the mouth, legs, and wings of Insects.

The life-history of insects.

Enunciation of the general principle that where the life-history involves a series or cycle of changes, the measures of suppression should be directed against the weakest link in the chain. Illustrations.

Methods of insect attack, and the enormous losses consequent thereon. Incidentally :—

(*a*) The stage in the life-history of the insect at which it becomes actively injurious.

(*b*) The period in the growth of the crop when insect injury begins, and the organs of the plant which are attacked.

Methods of *prevention* of insect attack, as distinguished from methods of *remedy*.

The *general* methods of prevention or remedy, as distinguished from the *special*. The former are, in the main, agricultural. The latter usually involve the application of specific insecticides, or the subjection of the crop to a course of treatment distinct from ordinary agricultural operations.

Insecticides : the composition and properties of the more important. The methods of application.

Mechanical appliances for the distribution of insecticides.

The inter-relationship of economic entomology and systematic botany.

The natural enemies of insects ; particularly (*a*) insectivorous mammals and birds, (*b*) other insects, (*c*) parasites.

The classification of insects, directed especially to the means of identifying injurious insects in the several stages of their life-history.

The characters of the natural orders of insects illustrated by genera which furnish destructive species.

Special discussion of the natural orders Coleoptera, Hymenoptera, Lepidoptera, Homoptera, and Diptera.

Convenient groupings of insects—

(*a*) According to the crop attacked.
(*b*) According to the mode of attack.

A detailed discussion of the chief insects injurious to cultivated plants and to farm live stock in Britain, with methods of prevention and remedy.

These insects include, *inter alia*—Wireworms, weevils, turnip flies, bark beetles, thrips, saw flies, sirices, surface caterpillars, winter moths, codlin moths, goat moths, leopard moths, magpie moths, cabbage butterflies, aphides, scale insects, mangel flies, cabbage flies, onion flies, Hessian flies, wheat midges, gout flies, frit flies, celery flies, leather jackets, ox warble flies, sheep's nostril flies, gad flies.

Other pests, outside the class Insecta; such as millepedes, arachnids, eelworms.

The present position of Agricultural Entomology in Britain and other countries, and the remarkable advances which have been made in the study during the last decade.

The entire course of lectures is profusely illustrated by carefully prepared natural specimens, the characters of which are demonstrated to students by the Lecturer. The instruction is further facilitated by an unique set of specially prepared coloured diagrams, from the pencil of Miss Ormerod.

IX. ECONOMIC SCIENCE AS APPLIED TO AGRICULTURE.

PROFESSOR NICHOLSON.

The Lectures in Political Economy up to Christmas. For Synopsis, see under Faculty of Arts.

X. (*a.*) FORESTRY.

COLONEL BAILEY, *Lecturer.*

This class meets on five days a week, at 10 A.M., during winter.

1. *Principles of Sylviculture.* — Locality; atmosphere; climate; soil; effect of soil on forest vegetation; effect of forest vegetation on soil and atmosphere; shape and development of trees; duration of life of trees and their reproductive power; pure and mixed woods; mixture of species; the sylvicultural systems and their selection.

2. *Practical Sylviculture.* — Reclamation of soil; fencing; sowing; planting; natural regeneration; choice between natural regeneration by seed and artificial regeneration; choice between sowing and planting; combination of several methods; formation of mixed woods; tending of woods; thinning; tending of open woods; treatment of torrents and of sandhills.

3. *Injuries to Standing Woods and their Protection.*—Storms; fires; mammals and birds; insects; fungi.

4. *Utilization of Produce.*—Uses of wood; felling and trimming; conversion; measurement and sale; transport; harvesting of bark.

5. *Timber.*—Its structure, classification, and identification; technical properties — weight, hardness, durability, strength, loss and gain of moisture, &c.; defects.

6. *Working Plans.* — Preliminary explanations — working plan, forest capital, exploitable age, increment, possibility, revenue and interest; preliminary work—general description, analysis of crop, valuation, surveys, measurement of trees and logs, calculation of volume, calculation of exploitable age; the working plan — general explanations, plans for forests under various methods of treatment.

7. *Uses and Effects of Forests.*—Direct uses; indirect effects —effects on temperature and moisture, mechanical effects.

8. *Forestry in Scotland.* — General considerations; the financial question.

X. (*b.*) EXPERIMENTAL PHYSICS.

PROFESSOR TAIT.

Full Laboratory Course, see under Faculty of Arts.

X. (*c.*) ENGINEERING.

PROFESSOR ARMSTRONG.

For Synopsis of Lectures, see Winter Course under Graduation in Engineering.

XI. ENGINEERING FIELD WORK.

PROFESSOR ARMSTRONG.

For Synopsis of Lectures, see under Graduation in Engineering (Summer Session).

Graduation in Science.

I.—PURE SCIENCE.

A.—Regulations and Curricula applicable to all who commenced attendance on Science Classes after 1st October 1892.

For those who commenced attendance on qualifying Science Classes before 1st October 1892, *see Regulations, page* 436.

Two Degrees in Science are conferred by the University of Edinburgh, viz.:—Bachelor of Science (B.Sc.) and Doctor of Science (D.Sc.). These degrees are given in Pure Science and in Applied Science.

QUALIFICATIONS REQUIRED OF CANDIDATES.

I.—Preliminary Examination.

The Preliminary Examinations in General Education are held in the Examination Hall in the University, in autumn and spring.

(*See Time-Table of Examinations, page* 143.)

Candidates who intend to present themselves for Examination may obtain Schedules at the Matriculation Office, which must be completed and lodged and the Fees paid at that office not later than 20th September 1895 and 18th March 1896 for the Autumn and Spring Examinations respectively.

The Fee for the Preliminary Examination is 10s. 6d. for each appearance.

Candidates who cannot attend personally to pay the Fees should transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts* crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts. When names are not entered nor Fees paid on or before the stated dates, an additional or late entry fee of 10s. must be paid before the Candidate can be admitted to Examination. A Candidate is not held to be entered for the Examination until his Schedule is lodged, the Fee paid, and a Pass to the Examination obtained.

1. Candidates before entering on the Curriculum must, unless exempted, pass a Preliminary Examination in the following subjects:—[1]
    1. English.
    2. One of the following: — Latin, Greek, French, or German.
    3. Mathematics.
    4. One of the following:—Latin, Greek, French, or German (if not already taken), Italian, Dynamics.
2. Candidates must pass on the higher standard in Mathematics.
3. *English* includes Grammar and Composition, and the Outlines of Geography and British History, the standard being that presently adopted for the Higher Grade Leaving Certificate of the Scottish Education Department.
4. *Latin* and *Greek* comprise grammatical questions, translations into English from Latin or Greek authors, not previously prescribed, and translations of plain passages or easy sentences from English into Latin or Greek. The standard is that presently adopted for the Lower Grade Leaving Certificate.
5. *French*, *German*, and *Italian* comprise grammatical, literary, and easy philological questions, translation into English from French, German, or Italian authors, not previously prescribed, and translations from English into French, German, or Italian. The standard is that presently adopted for the Higher Grade Leaving Certificate of the Scottish Education Department.
6. *Mathematics* comprises (1) Arithmetic, including Vulgar and Decimal Fractions, Proportion, Percentage, Square Root, Simple Interest; (2) Algebra, including Fractions, Factors, Square Root, Equations of the First Degree, Simultaneous Equations of the First Degree, Easy Quadratic Equations, Problems leading to the above Equations; (3) Geometry—Euclid, Books I., II., III. (or their equivalents), with easy deductions; Books IV., VI., and the first twenty-one propositions of Book XI. (or their equivalents), with deductions, Quadratic Equations, Trigonometry to the solution of Triangles inclusive, and the use of Logarithmic Tables.
7. *Dynamics* includes Elementary Statics and Kinetics of Solids, Liquids, and Gases.
8. A Candidate must pass in all the required subjects at one or not more than two Examinations, provided that he may offer himself for re-examination, as often as may be necessary, to satisfy this condition.
9. Attendance on any Science Class will not qualify for Graduation unless the whole Preliminary Examination has been passed.

[1] See Additional Regulations of Joint Board, page 140.

II.—Degrees in Pure Science.

1. Candidates for the Degree of Bachelor of Science must, in the course of not less than three Academical years (*i.e.* three Winter Sessions, or two Winter Sessions, and three Summer Sessions), attend at least seven courses of instruction in the subjects included in the Science Examination which they purpose to undergo.
2. Three of these Courses must be in subjects prescribed for the First Science Examination, and four must be in subjects prescribed for the Final Science Examination.
3. Four of the seven Courses must be taken in the University of Edinburgh. The remaining three Courses may be taken at this University or at other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of Graduation in Science, provided that the fees for attendance at an approved Institution or under a recognised teacher in Edinburgh, shall in all cases not be less than the fees exigible for the corresponding Courses in the University of Edinburgh.[1]
4. Every Candidate for a Degree in Science must produce his Matriculation Ticket for the year in which he appears for Examination or Graduation.
5. All Candidates, not Matriculated Students of this University, availing themselves of the permission to attend Lectures at approved Institutions or by recognised teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names at the Matriculation office, paying a fee of the same amount as the Matriculation Fee, and having, in respect of such payment, a right to the use of the University Library.
6. A Student who before October 1892 has completed a part of his course of study with a view to Graduation in Science under regulations in force at the time in this University, and shall thereafter complete his course of study and pass the necessary Examinations in conformity with such regulations, as with those now in force, may become a Candidate for the Degree of Bachelor of Science.
7. Candidates for Graduation who have previously passed the Examinations are required to intimate to the Clerk to the Senatus their intention to graduate, and pay the Registration fee at least ten days before the date of Graduation. Those whose Examinations are not then completed are required to give such intimation at the earliest possible date, and at latest one clear day before the day of Graduation.

[1] Only Institutions and Teachers with the necessary staff and appliances for Theoretical and Practical Instruction in Science will be recognised by the University. A List of Universities and Institutions at present recognised in terms of this regulation is given on next page.

UNIVERSITIES AND INSTITUTIONS AT PRESENT RECOGNISED IN TERMS OF REGULATION II. 3.

The Universities of St Andrews, Glasgow, Aberdeen, Oxford, Cambridge, Dublin, and Victoria University, Manchester.

The Glasgow and West of Scotland Technical College; University College, Dundee; University College, London; King's College, London; The Royal College of Science, South Kensington; The Owens College, Manchester; The Mason College, Birmingham; The College of Science, Newcastle-on-Tyne; The Yorkshire College of Science, Leeds; University College, Bristol; University College, Liverpool; The Firth College, Sheffield; University College, Nottingham; The University College of North Wales, Bangor; University College of Wales, Aberystwith; The University College of South Wales and Monmouthshire; The Engineering College, Cooper's Hill.

The Queen's College, Belfast; The Queen's College, Cork; The Queen's College, Galway; The College of Science, Stephen's Green, Dublin; The School of Mines, Dublin; The Royal Agricultural College, Cirencester; The College of Agriculture, Downton; The University College, North Wales, Bangor; and the Veterinary Colleges of the United Kingdom.

The Presidency Colleges in Calcutta, Madras, and Bombay. The Thomasson Engineering College, and the Engineering College, Poona.

M'Gill University, Montreal; The University College of Toronto; Queen's University, Kingston, Ontario; The University of Sydney; The University of Melbourne; The University of Adelaide; Wellington College; The University of Otago; Dalhousie College, Halifax, Nova Scotia; Stellenbosch College, South Africa.

The University of Harvard; The University of Yale; The Johns Hopkins University.

The Universities, and Polytechnic Schools supported and regulated or recognised by the governments of the respective Countries of Europe.

EXAMINATIONS.

(A.) DEGREE OF BACHELOR OF SCIENCE.

For the Degree of Bachelor of Science there are two Examinations, conducted by written questions, as well as orally and practically.

(*a.*) *First Science Examination.*

1. The First Examination for the Degree of Bachelor of Science is as to the general knowledge of the Candidate on the following subjects, viz. :—

(i.) Mathematics, or Biology (*i.e.* Zoology and Botany).
(ii.) Natural Philosophy.
(iii.) Chemistry.

2. The Examination in these subjects is the same as for the ordinary degree of Master of Arts.

3. Candidates may present themselves in any one or more of these subjects at any Examination held after they have attended a full course in the subject or subjects professed.

(*b.*) *Second Science Examination.*

1. The Second B.Sc. Examination is on a higher standard in any three or more of the following subjects :—

(i.) Mathematics.
(ii.) Natural Philosophy.
(iii.) Astronomy.
(iv.) Chemistry.
(v.) Human Anatomy, including Anthropology.
(vi.) Physiology, including Histology.
(vii.) Geology, including Mineralogy.
(viii.) Zoology, including Comparative Anatomy.
(ix.) Botany, including Vegetable Physiology.

2. The standard of this Examination is as nearly as possible equivalent to that of the Examination for the Degree of Master of Arts with Honours, where the subjects are different : and where the subjects are the same the examination is identical.

3. A subject already taken for the First Examination may be taken also for the Second Examination.

4. Candidates presenting themselves for the Second Examination must have attended four full courses of higher instruction, including practical or laboratory work, in the Subjects professed.

5. The Second Science Examination cannot be taken sooner than one year after the Candidate has passed the First Science Examination.

6. If a student, before passing the Preliminary Examination has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class for examination, on condition of his passing the full Preliminary Examination within such time as the Senatus may appoint.

7. A Candidate for the degree of Bachelor of Science is not deemed to have attended a class as part of the curriculum for that degree unless he presents a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

8. The Examiners for the degree of Bachelor of Science have power to report that a Candidate has passed with special distinction in one or more of the subjects professed by him : and in such a case a Diploma is given setting forth the subjects in respect of which the degree has been granted, and the subject or subjects in which special distinction has been obtained.

9. A Candidate who has passed the First and Second Science Examinations, and otherwise complied with the regulations for Graduation, will be recommended to the Senatus for the Degree of Bachelor of Science.

Qualifying Courses for the Final Examination in Pure Science.

In each subject professed, two written papers are set, namely, a *first* and a *second* paper, and the Practical and Oral Examinations also consist of *first* and *second* parts. The second part of the Examination is of a higher standard than the first. Candidates must pass the first section of the Examination (as well written as practical and oral) in all the subjects professed. They are also required to pass the second section of the Examination in at least one of their subjects. The following Courses of Higher Instruction in this University, (1) Intermediate and (2) Advanced, qualify for the first and second stages of the Final Examination in Pure Science :—

1. Mathematics : (1) *Intermediate Course*, as for Honours in Arts. (2) *Advanced Course*, as for Honours in Arts.
2. Natural Philosophy : (1) Advanced Mathematical, (2) Advanced Experimental, or (3) Special Laboratory Course.
3. Astronomy : (1) and (2), Advanced Courses of Practical Instruction at the Observatory.
4. Chemistry : (1) *Intermediate Course :* One Winter Course, or two Summer Courses, in Laboratory. (2) *Advanced Course :* Further Laboratory Work and one Lecture Course.
5. Human Anatomy, including Anthropology : (1) *Intermediate Course :* Six months' Lectures on Systematic Anatomy (Winter Session), with six months' Practical Anatomy. (2) *Advanced Course :* Course of Anthropology.
6. Physiology : (1) *Intermediate Course :* Six months' Lecture Course and Practical Work (Winter Session). (2) *Advanced Course :* Laboratory Work.
7. Geology, including Mineralogy : (1) *Intermediate Course :* Winter Lecture Course and Practical Class. (2) *Advanced Course :* Laboratory Work, or Advanced Lecture Course.
8. Zoology, including Comparative Anatomy : (1) *Intermediate Course :* Six months' Course, including Lectures on Invertebrate Zoology and on Embryology, and Laboratory Work. (2) *Advanced Course :* Six months' Course on the Morphology of the Invertebrata and Vertebrata, and Laboratory Work.
9. Botany, including Vegetable Physiology : (1) *Intermediate Course :* Six months' work in Laboratory. (2) *Advanced Course :* Laboratory Work, with one or more Lecture Courses.

(B.) Degree of Doctor of Science.

1 Graduates of this University who have held the Degree of Bachelor of Science for a term of five years may offer themselves for the Degree of Doctor of Science.

2. A Candidate for the Degree of Doctor of Science must profess one

of the following branches of Science:—Mathematics; Natural Philosophy; Astronomy; Chemistry; Human Anatomy, including Anthropology; Physiology, including Histology; Geology, including Mineralogy; Zoology, including Comparative Anatomy; Botany, including Vegetable Physiology; and in it he will be expected to show a thorough knowledge.

3. He must submit a Thesis or a published Memoir or Work, to be approved by the Senatus. The Thesis, Memoir, or Work, must be a record of original research undertaken by the Candidate, and must be accompanied by a Declaration, signed by him, that the work has been done and the account of it composed by himself.

The Thesis must be sent to the *Dean of the Faculty of Science* on or before 30th April in the year in which the Candidate proposes to graduate.

The Candidate, if required by the Senatus, must pass such an examination as may from time to time be determined.

ORDINANCES OF THE UNIVERSITIES' COMMISSIONERS FOR ENCOURAGEMENT OF SPECIAL STUDY AND RESEARCH AND FOR HIGHER DEGREES, WHICH, IN ALL PROBABILITY, WILL COME INTO OPERATION BEFORE 1ST OCTOBER 1895.

I. ORDINANCE NO. 61, GENERAL NO. 23—REGULATIONS FOR THE ENCOURAGEMENT OF SPECIAL STUDY AND RESEARCH, AND FOR APPOINTMENT OF RESEARCH FELLOWS.

I. It shall be in the power of the Senatus Academicus in each University, with the approval of the University Court, to make regulations under which graduates of Scottish Universities, or of other Universities recognised by the University Court for the purposes of this Ordinance, or other persons who have given satisfactory proof of general education and of fitness to engage in some special study or research, may be admitted to prosecute such study or research in the University.

II. It shall be the duty of the Senatus Academicus in each University—

(1) To receive and decide upon all applications for admission to prosecute special study or research.
(2) To prepare a list of all persons so admitted (hereinafter referred to as Research Students).
(3) To make regulations for the supervision of their work.
(4) To satisfy themselves from time to time that the Research Students are carrying on their work in the University in a satisfactory manner.

(5) To suspend or exclude from any course any student whose conduct or progress is unsatisfactory.

III. Every applicant for admission must send in to the Senatus Academicus a written application stating any degree or other distinction which he has already obtained, the line of study or research which he wishes to prosecute and the probable period of its duration, together with evidence as to his character, capacity, and general qualifications.

IV. Any application for admission shall be in the first instance referred by the Senatus Academicus to the appropriate Faculty, or to a Committee appointed by the Senatus; one member of the Committee shall always be a Professor or Lecturer within whose department the proposed line of study or research falls. No applicant shall be recommended by the Faculty or the Committee who has not satisfied them by examination or otherwise that he is qualified to prosecute the proposed line of study or research, and further—

(*a*) That his proposed line of study or research is a fit and proper one;

(*b*) That he possesses a good general education;

(*c*) That he is of good character;

(*d*) That he proposes to prosecute his studies or research during a period to be approved by the Senatus Academicus.

The Faculty or the Committee shall make a report to the Senatus Academicus upon each application. It shall also be their duty, subject to the regulations of the Senatus Academicus, to provide for the supervision of the Research Student's work, and to report at least once a year to the Senatus as to his progress and conduct. The Senatus shall then determine whether he shall remain a Research Student.

V. Every Research Student shall be required to matriculate each year, paying the ordinary fee.

VI. Research Students shall have access to and the use of the University Laboratories and Museums, under such conditions as to payment and otherwise as the University Court, after consultation with the Senatus Academicus, may determine.

VII. The title of Research Fellow may be conferred by the Senatus Academicus, with the approval of the University Court, on Research Students who have shown special distinction. Such title shall not of itself confer any right to stipend, but it shall be in the power of the University Court to provide a stipend of such amount and for such period as it may think fit to any Research Fellow under the powers of Section XI., Sub-section 8, of Ordinances numbered 25 and 27, Section X., Sub-section 8, of Ordinance numbered 26, and Section IV., Sub-section 2, of Ordinance numbered 46.

VIII. (1) The Research Fellows shall be appointed as aforesaid after consideration of the report or reports submitted in terms of Section IV. hereof.

(2) The title of Research Fellow may be conferred either at the commencement of the Research Student's course of study or research, or at any time during its progress, as the Senatus Academicus may determine.

(3) Research Fellows shall retain their title and stipend, if any, for the period during which they are engaged in special study or research in the University, and no longer.

(4) Research Students who have been appointed Research Fellows shall continue to be subject to the conditions above prescribed as to the supervision of their work and the reports to be made thereon.

IX. Nothing herein contained shall prejudice the right of Research Students to such Fellowships, Scholarships, or Prizes as may be open to them by Ordinance or Deed of Foundation.

X. The University Court may provide such sums as it may think fit in aid of the expenses of Special Study or Research.

II. Ordinance No. 62, General No. 24—Regulations for Higher Degrees in Arts and Science (in so far as Applicable to Degrees in Science).

Degree of D.Sc.

I. Graduates who have taken the degree of Master of Arts in any Scottish University with first or second class honours in Mathematics and Natural Philosophy under the conditions prescribed by the Regulations for Degrees in Arts, or under the Regulations previously in force in such University, may offer themselves for the degree of Doctor of Science (D.Sc.) in the same University after the expiry of five years from the date of their graduation in Arts, under the same conditions as if they held the degree of Bachelor of Science.

II. Research Students within the meaning of Ordinance No. 61, General No. 23—Regulations for the Encouragement of Special Study and Research and for the appointment of Research Fellows, may offer themselves for the degree of Doctor of Science of the University in which they have prosecuted some special study or research under that Ordinance, although they have not taken the degree of Bachelor of Science or the degree of Master of Arts with honours as aforesaid, in that University; provided—

(1) That they hold the degree of Bachelor of Science or Bachelor of Medicine of a Scottish or any recognised University, or a degree of any such University, which the Senatus Academicus shall hold to be equivalent to the degree of Bachelor of Science or to the degree of Master of Arts with first or second class honours in Mathematics and Natural Philosophy; provided that Candidates who hold any such

degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of Doctor of Science, to pass an examination equivalent to an Honours or to a Final Science examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and that they produce evidence of satisfactory progress in the special study or research undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

III. All Candidates for the degree of Doctor of Science shall present a Thesis or a published Memoir or Work, to be approved by the Senatus on the recommendation of the Faculty of Science; provided that, if required by the Senatus, the Candidate shall also be bound to pass such an examination conducted orally or practically, or by written papers, or by all of these methods, on the subjects of his special study or of his Thesis, as may from time to time be determined. The Thesis shall be a record of original research undertaken by the Candidate, and shall be accompanied by a Declaration, signed by him, that the work has been done and the Thesis composed by himself.

IV. The degree of Doctor of Science shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

Regulation regarding the Instruction and Examination of Women in Chemistry, Botany, and Zoology for Graduation in Science.

Any woman who has received the requisite instruction in Chemistry, Botany, and Zoology, in any other University or Institution already approved by the University with the view to the Graduation of men, or under any teacher already recognised with that view, or in the Edinburgh School of Medicine for Women, Surgeon Square, Edinburgh, or in the Medical College for Women, Chambers Street, Edinburgh, will—subject to the provisions of Ordinance[1] No. 18, General No. 9—Regulations

[1] See Ordinance, Appendix to Calendar, 1892-93, page 51.

for the Graduation of Women, &c., be admitted to Examination in these subjects for Graduation in Science.

Any woman, not a Matriculated Student of the University, availing herself of the permission to attend the Lectures on Chemistry, Botany, or Natural History, at the above-named Schools of Medicine in Edinburgh, must, at the commencement of each year of such attendance, enrol her name in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

OUTLINE OF SUBJECTS OF EXAMINATION FOR DEGREES IN SCIENCE.

I.—First Examination for the Degree of B.Sc. in Pure Science.

(*a*1) MATHEMATICS.

The Examinations in Mathematics and in Natural Philosophy are the same as for the Degree of Master of Arts. See page 154.

(*a*2) ZOOLOGY.

(*a*2) BOTANY.

(*b*) NATURAL PHILOSOPHY.

(*c*) CHEMISTRY.

The Examinations in Zoology, Botany, and Chemistry, are the same as for the First Professional Examination for Degrees in Medicine.

II. Final Examination.

See page 407 *for the Courses which qualify in the various Subjects for this Examination.*

(*a*) MATHEMATICS.

(*b*) NATURAL PHILOSOPHY.

The Examinations in Mathematics and Natural Philosophy are the same as for the Degree of M.A. with Honours.

(*c*) ASTRONOMY.

1. The Principles and Practice of astronomically finding the geographical co-ordinates of the place of observation on land and at sea.

2. The Principles that guide the actual determination of the chief astronomical constants—*refraction*, *aberration*, *nutation*, *precession*, and *solar-parallax* in fixed observatories.

3. An account of the methods used for determining the figure and size of the earth.

The Candidate will be required to explain the general principles on which the orbits of planets, etc., are calculated, and must show a thorough knowledge of the methods followed in the case either of a *comet*, *planet*, *double-star*, or of a *meteorite* and a *meteoritic swarm*.

One group of observations must have been made in the field, or at an observatory, and fully reduced so as to show the value of the derived results, and the precautions that have been taken to free them from instrumental and personal errors. Candidates will also be examined as to the best ways of testing the critical parts of instruments, such as a *pivot*, *screw*, *level*, etc.

(*d*) CHEMISTRY.

Inorganic Chemistry.

Organic Chemistry.

Relation between Chemical and Physical Properties.

Complex Qualitative Analysis, Simple Quantitative Determinations, Gas Analysis, Organic Analysis, and the preparation of pure reagents. [*This part of the Examination will be conducted practically.*]

(*e*) HUMAN ANATOMY, INCLUDING ANTHROPOLOGY.

Candidates are required to show a competent knowledge of the development of the human body and of its parts and organs; also the position and general arrangement of the different "systems" of organs which enter into its construction, and the structure both of these organs and of the simple tissues. A special knowledge of the locomotory apparatus and of the nervous and vascular systems will be required. It should be understood that an acquaintance with the technical applications of human anatomy to the practice of Medicine and Surgery is not asked for.

The Anthropological part of the subject will embrace a knowledge of race characters as found in the skull and other parts of the skeleton, in the skin, eyes, hair, features, and the external configuration of the body generally. The methods of anthropometrical measurement both of the living body and of the skeleton should be known. The possible influence of use and of external surroundings in producing modifications in the physical characters of man will require attention. An acquaintance with the "types" of mankind and the structural relations of man to the higher mammals will also be expected.

(*f*) ANIMAL PHYSIOLOGY.

The Structure, Chemical Composition, and Functions of the Elementary Tissues of Man and Animals.

The Minute Structure and Functions of the Organs concerned in the Nutrition of Man and Mammals.

The Chemical Composition and Functions of the Foods and Fluids involved in the Process of Nutrition.

The Temperature of Man and Animals.

Human Voice and Speech.

The Minute Structure and Functions of the Organs of Sense, Brain, Spinal Cord, and chief Nerves of Man and other Vertebrates.

In the Oral Examination Candidates will be examined on the above subjects, and will also be required to show their practical acquaintance with Histology, Physiological Chemistry, and Experimental Physiology.

(*g*) GEOLOGY, INCLUDING MINERALOGY.

1. *Dynamical Geology.*—The nature and operation of geological agents:—The Atmosphere, Rain, Terrestrial Waters, Ice, the Sea, Plants and Animals, Volcanoes, Movements of the Earth's Crust.

2. *Mineralogy.*—Physical and Chemical characters of the more important and typical species in the various mineral groups—more especially the rock-forming minerals and ores.

3. *Petrology.*—Macroscopic and Microscopic Characters, Composition, Origin and Distribution of Rocks.

4. *Structural Geology.*—Structure of Rock-masses, Bedding, Joints, Cleavage, Foliation, Metamorphism, Faults, Unconformity.

5. *Stratigraphical Geology.*—The History of the Geological Systems—more especially those of the British Islands.

6. *Palæontological Geology.*—Characters, and distribution in time, of the more important Genera and Orders found fossil in Britain.

7. *Physiographical Geology.*—Origin of the present outlines of the Earth's surface.

(*h*) ZOOLOGY, INCLUDING COMPARATIVE ANATOMY.

1. A Knowledge of the Systematic Zoology of the Invertebrate and Vertebrate groups.

2. The Elements of the Comparative Anatomy and Development of the Invertebrata and Vertebrata.

3. The Principles of Natural Selection, a Knowledge of the Geographical Distribution of Vertebrate Animals.

The following books are recommended:—Lang's "Text-Book of Comparative Anatomy;" Huxley's "Vertebrata;" Flower and Lyddeker's "Mammalia;" Vogt and Yung's Practical Zootomy German or French edition); Darwin's "Origin of Species;" Wallace's "Darwinism" and "Island Life;" Marshall's "Embryology."

(*i*) BOTANY, INCLUDING VEGETABLE PHYSIOLOGY.

1.—MORPHOLOGY.

1. (*a.*) General:—Doctrine of the Cell; its historical development. Structure of the Cell; its forms and patterns. Protoplasm, the nucleus

and nucleolus, plastids. Substances in protoplasm. Forms of cell-formation. Tissues, their kinds and formation. Primary disposition of tissues. Secondary changes in tissues and growth in thickness. Differentiation of the plant into members, the relationships of the members, their development. Branching, its forms. Metamorphosis of members, and the spiral theory. Special features of the flower; its development. Fruits, their forms and development. Buds and their modifications, their development. Hairs. Sporangia and their modifications and development. The Seed, its structure and development. Sexual organs, their forms and development.

(*b.*) Special (1)—The principal facts in the life-history of the following:—Gomphonema, Fuligo, Protococcus, Nostoc, Bacterium, Vaucheria, Pandorina, Pediastrum, Œdogonium, Coleochœte, Spirogyra, Closterium, Chara, Laminaria, Fucus, Polysiphonia, Nemalion, Dudresnaya, Batrachospermum, Corallina, Protomyces, Entyloma, Mucor, Pythium, Saprolegnia, Podosphaera, Eurotium, Penicillium, Polystigma, Xylaria, Claviceps, Ascobolus, Tuber, Saccharomyces, Collema, Usnea, Parmelia, Puccinia, Endophyllum, Agaricus, Phallus, Anthoceros, Radula, Riccia, Marchantia, Sphagnum, Andreæa, Funaria, Polytrichum, Hymenophyllum, Aspidium, Osmunda, Salvinia, Pilularia, Marsilea, Isöetes, Ophioglossum, Marattia, Equisetum, Lycopodium, Selaginella, Cycas, Pinus, Taxus, Avena, Scilla, Dracæna, Orchis, Ulmus, Digitalis, Helianthus, Vicia, Capsella. Details not of obvious significance from the point of view of Comparative Morphology, will not be required.

(2) The flower and fruit characters of the following Natural Orders:—Coniferæ, Cycadaceæ, Gramineæ, Cyperaceæ, Alismaceæ, Aroideæ, Palmæ, Juncaceæ, Liliaceæ, Amaryllideæ, Irideæ, Scitamineæ, Orchideæ, Salicineæ, Cupuliferæ, Urticæ, Euphorbiaceæ, Loranthaceæ, Thymeleaceæ, Polygonaceæ, Chenopodiaceæ, Labiatæ, Acanthaceæ, Scrophularineæ, Solanaceæ, Convolvulaceæ, Borragineæ, Polemoniaceæ, Gentianeæ, Asclepiadeæ, Apocynaceæ, Primulaceæ, Ericaceæ, Vacciniaceæ, Campanulaceæ, Compositæ, Dipsaceæ, Valerianeæ, Rubiaceæ, Caprifoliaceæ, Umbelliferæ, Cacteæ, Cucurbitaceæ, Myrtaceæ, Saxifragaceæ, Rosaceæ, Leguminosæ, Sapindaceæ, Rhamneæ, Ilicineæ, Rutaceæ, Geraniaceæ, Lineæ, Tiliaceæ, Malvaceæ, Hypericineæ, Caryophylleæ, Polygaleæ, Violarieæ, Resedaceæ, Cruciferæ, Papaveraceæ, Nymphæaceæ, Berberideæ, Ranunculaceæ.

Candidates will be expected to be able to draw floral diagrams showing the relations of parts of the flowers in those orders, and to be acquainted with the theoretical explanations of the more important anomalous and divergent types belonging to them. This section, 2, will be especially dealt with in the practical examination, and need not form part of the written examination.

2.—Taxonomy.

Principles of plant classification. The History of its development

and the influence upon it of the dogma of the constancy of species, and of descent. The methods associated with the names of—Cesalpino, Ray, Linnaeus, de Jussieu, de Candolle, Brown, Hofmeister, Hooker.

3.—Distribution.

The elements which determine distribution and dispersion of plants. The leading facts of geographical distribution. Theories of Insular and mountain Floras. The leading facts of palaeophytology, and their bearing on the theory of descent.

4.—Physiology.

Sustentative function of plants. Materials of plant food, their sources. Absorption of food-material; its synthesis and distribution in the plant. Parasitism. Saprophytism. Metabolism. Vegetable digestion and assimilation. Respiration. Transpiration. Movement of gases and liquids in plants. Growth. Properties of growing parts. Conditions requisite for and affecting growth. Germination. Correlation of growth. Irritability and Contractility of protoplasm. The adaptation of tissues and members to function. Reproductive function of plants; history of the subject. Agamogenesis and Gamogenesis. Embryogeny. Alternation of generations. Apogamy and Parthenogenesis; Apospory. Self and Cross fertilisation and the theory of fertilisation. Hybridism. Variation. Heredity. Special phenomena in flowering plants.

II.—ENGINEERING.

B.—Regulations and Curriculum applicable to all who commence attendance on Science Classes after 1st October 1893.

For those who commenced attendance on qualifying Science Classes before 1st October 1893, *see Regulations F, page* 439.

I. Two degrees in Science in Engineering are conferred by the University of Edinburgh—viz., Bachelor of Science in Engineering and Doctor of Science in Engineering.

1.—Preliminary Examination for Bachelor of Science.

II. Every candidate for the degree of Bachelor of Science in Engineering must pass the Preliminary Examination[1] prescribed for Degrees in Pure Science, and the conditions with respect thereto imposed by the Regulations for Degrees in Pure Science are applicable in all respects to Degrees in Engineering except as follows—viz., the Preliminary Examination must be passed before the candidate presents himself for any part of the First Science Examination, but not necessarily before the candidate enters on his curriculum.

[1] See page 403.

II.—Courses of Instruction.

III. (1) Candidates must, in the course of not less than three Academical years (*i.e.* three Winter Sessions, or two Winter Sessions and three Summer Sessions), attend at least the eleven courses of instruction prescribed under Section VIII. hereof.

(2) It is the duty of the Senatus to determine from time to time which of the said courses are full and which are half courses respectively, and also to determine the number of meetings of which such full courses and half courses respectively shall consist, and to report its determination to the University Court for its approval.

IV. (1) Five full courses or their equivalent (counting two half courses as one full course) must be taken in the University of Edinburgh, and must include the necessary courses in Engineering, except where the University Court, after consultation with the Senatus, sees fit to allow one of the courses in Engineering to be taken outside the University under the provisions of the immediately succeeding subsection.

(2) The remainder of the said courses may be taken in other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science in Engineering :[1] Provided that the fees for attendance at an approved Institution in Edinburgh or under a recognised teacher there are not less than the fees exigible for the corresponding courses in the University of Edinburgh.

V. The University Court may make regulations to enable candidates, not matriculated students of the University of Edinburgh, availing themselves of the permission to attend lectures at approved institutions or by recognised teachers in Edinburgh to obtain, on payment of a fee not exceeding in amount the matriculation fee paid by the students of the University, a right to the use of the Library of the University.

VI. (1) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Senatus a scheme specifying what proportion of the courses shall be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. The Senatus transmits such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

(2) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Faculty of Science, for its consideration, syllabuses of the subjects and books proposed for the work of their classes during the next Academical year. The Faculty of Science transmits such syllabuses, with such observations as it may think fit to make thereon, to the Senatus for its approval.

VII. The provisions of the preceding section do not apply to approved Institutions or recognised teachers outside Edinburgh ; but the University Court will not grant or continue recognition to any Institu-

[1] See footnote, page 404.

tions or teachers unless it is satisfied that their courses of instruction are equivalent to the courses sanctioned in the University of Edinburgh.

VIII. The subjects of study are as follows :—

1. Mathematics, including Analytical Geometry, and Differential and Integral Calculus.
2. Natural Philosophy, including Applied Higher Mathematics.
3. Chemistry.
4. A course in the Physical Laboratory or in the Chemical Laboratory, or of Practical Chemistry.

5, 6. Two Courses in Practical work in Drawing.

7, 8, 9. Three Courses in Engineering, including Engineering Laboratory Practice, and Field Work.

10. Natural Philosophy, involving Higher Mathematics.
11. One of the following :—
    - (*a*) Engineering Laboratory Practice, Mechanical or Electrical (Special Course).
    - (*b*) Electricity—Pure and Applied.
    - (*c*) Geology and Mineralogy.

III.—Science Examinations.

(*a*) *First Science Examination.*

IX. (1) There is a First Science Examination in the three following subjects, viz.:—(1) Mathematics, (2) Natural Philosophy, (3) Chemistry ; and the examinations in Natural Philosophy, and in Chemistry are so far as possible practical.

The examination in Geometrical Drawing may be taken either at the First or at the Final Science Examination.

(2) The examination in Mathematics includes the higher branches of Mathematics specified under Mathematics in the Section immediately preceding ; but it is optional to Candidates to pass the same examination in this subject as that required for the ordinary Degree of Master of Arts, provided that in that case they will be required, before graduation, to pass an examination in the remainder of the subject.

(3) Candidates may present themselves in any one or more of the subjects of the First Science Examination at any examination held after they have attended a full course in the subject or subjects professed.

The following Classes in the University qualify for the First Science Examination in Engineering :—

1. Mathematics—Intermediate Honours Class (Winter), or Advanced Class (Summer).
2. Natural Philosophy—As for Pure Science Degrees.
3. Chemistry—As for Pure Science Degrees.
4. Physical or Chemical Laboratories—A three months' Course in either.
5. Drawing—Class of Geometrical Drawing during one Winter Session.

(*b*) *Final Science Examination.*

X. (1) There is a Final Science Examination in the remaining subjects specified in Section VIII. hereof; and, if required, in the higher branches of Mathematics as provided in Section IX., Sub-section 2 hereof.

(2) Candidates may present themselves in any one or more of these subjects at any examination held after they have passed the whole of the subjects comprised in the First Science Examination and have attended the required courses in the subjects professed, provided that for this purpose subjects 5, 6, 7, 8, and 9, specified in Section VIII., shall form one subject.

XI. A candidate for the degree of Bachelor of Science in Engineering is not deemed to have attended a class as part of the curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

XII. It is competent to the Examiners for the degree of Bachelor of Science in Engineering to report that a candidate has passed with special distinction in one or more of the subjects professed by him; and in such a case a diploma is given setting forth the subjects in respect of which the degree has been granted, and the subject or subjects in which special distinction has been obtained.

XIII. It is competent to the University Court of the University of Edinburgh to modify from time to time the provisions as to curriculum hereinbefore contained, in case such modification may be rendered desirable by the development of Engineering Science, or in consequence of further provisions having been made within or without the University for the study of any branch of the said Science: Provided that in no case shall the number of full courses of study required be less than the number required for the degree of Bachelor of Science in Pure Science, as specified in the Regulations therefor.

The following Classes in the University qualify for the Final Science Examination in Engineering:—

1. Drawing—Class of Engineering and Mechanical Drawing during one Winter Session.
2. Engineering—(*a*) Class of Systematic Engineering during two Winter Sessions. (*b*) Class of Engineering Field-Work, held in Summer.
3. Engineering Laboratory, or Electricity (Pure and Applied), or Geology and Mineralogy—A three months' Course in either.

IV.—Doctorate of Science in Engineering.

XIV. Graduates of the University of Edinburgh who have held the degree of Bachelor of Science in Engineering for a term of five years, may offer themselves for the degree of Doctor of Science in Engineering in the said University.

XV. A candidate for the degree of Doctor of Science in Engineering must present a Thesis, or a published memoir or work, to be approved by the Senatus on the recommendation of the Faculty of Science: Provided that, if required by the Senatus, the candidate must pass such an examination as may from time to time be determined. The Thesis must be a record of original research undertaken by the candidate, or of important engineering work designed by himself, and actually carried out, and must be accompanied by a declaration, signed by him, that these conditions have been satisfied.

General.

XVI. Candidates who produce certificates that they have satisfied all the conditions prescribed by these Regulations, and who have passed the necessary examinations, will be entitled to receive the degrees of Bachelor of Science in Engineering and Doctor of Science in Engineering, as the case may be, on the payment of the fees required.

XVII. A student who, at the time when these Regulations come into operation, has completed a part of his course of study with a view to graduation in Science in Engineering in the University of Edinburgh, under regulations in force at the time therein, and who thereafter completes his course of study and passes the necessary examinations in conformity with such regulations, or with the provisions hereof, may become a candidate for the degree of Bachelor of Science in Engineering.

XVIII. The degrees of Bachelor and Doctor of Science in Engineering are in no case conferred on persons who have not complied with the conditions hereinbefore set forth, and are not conferred *honoris causâ tantum*.

FIRST BACHELOR OF SCIENCE EXAMINATION.

Outline of Subjects of Examination.

1. Mathematics, including Analytical Geometry and Differential and Integral Calculus.

2. Natural Philosophy, mainly Practical Physics.

3. Chemistry—Same as for First Examination in Pure Science.

SECOND BACHELOR OF SCIENCE EXAMINATIONS.

1. (*a.*) Engineering—

Field-Work. — Surveying; Levelling; Setting out of Work; Calculation of Quantities.

Properties of Materials.—General Properties, with special knowledge of their Strength, and the Purposes to which they are applied, and some knowledge of their Cost.

Strength and Stability of Structures designed by Civil Engineers.—Metal and Timber Bridges and Roofs. Arches in Masonry. Walls. Retaining Walls. Embankments. Cuttings. Breakwaters. Aqueducts. Pipes. Canals.

Strength and Form of the Elements of Machines.

Design of Combined Structures.—An elementary knowledge of the Design of Bridges and Roofs, of Reservoirs, Embankments, collecting and distributing Machinery of Waterworks, and of the main features of Railway construction, Harbours, and Drainage.

Design of Machinery.—An elementary knowledge of the construction of the Steam Engine, stationary and locomotive, of Prime Movers driven by Water, of Mill-wright work, and the general arrangement of Workshops and Factories.

Prime Movers.—Theory of Heat Engine. The Hot Air Engine. The Steam Engine. The Gas Engine. Turbines and Water Wheels. *Power Transmission*—Telodynamic, Hydraulic, Electric.

Engineering Laboratory Practice.

(*b.*) DRAWING—

Candidates must exhibit a good knowledge of Geometrical Drawing, including the use of Graphics as applied in the solution of Engineering problems, and be able to represent neatly, in the usual manner employed by engineers, Plans and Sections of Buildings and Machinery, and also to make Engineering Sketches with figured dimensions from actual objects.

2. NATURAL PHILOSOPHY—

Mathematical Physics.

3. (*a.*) ENGINEERING LABORATORY PRACTICE, MECHANICAL OR ELECTRICAL.

(*b.*) ELECTRICITY—PURE AND APPLIED.

(*c.*) GEOLOGY AND MINERALOGY—

Dynamical Geology.—The nature and operation of geological agents:—The Atmosphere, Rain, Terrestrial Waters, Ice, the Sea, Plants and Animals, Volcanoes, Movement of the Earth's Crust.

Mineralogy.—Physical and Chemical characters of the more important and typical species in the various mineral groups—more especially the rock-forming minerals and ores.

Petrology.—Macroscopic and Microscopic Characters, Composition, Origin and Distribution of Rocks.

Structural Geology.—Structure of Rock-Masses, Bedding, Joints, Cleavage, Foliation, Metamorphism, Faults, Unconformity.

Physiographical Geology.—Origin of the present outlines of the Earth's surface.

DOCTOR OF SCIENCE EXAMINATION.

A Candidate for this Degree will be required to offer a thesis or published memoir affording evidence of original work, and may also be required to pass a Special Examination.

III.—PUBLIC HEALTH.

C. — Regulations and Curriculum for Degrees in Public Health, applicable to all who commence attendance on Science Classes after 1st October 1894.

For those who commenced attendance on qualifying Science Classes before 1st October 1894, see Regulations G, page 442.

I. Two degrees in Science in Public Health are conferred by the University of Edinburgh, viz., Bachelor of Science in Public Health and Doctor of Science in Public Health.

I.—BACHELOR OF SCIENCE.

II. Candidates for the degree of Bachelor of Science in Public Health must be graduates in Medicine of a University of the United Kingdom, or of some other University recognised for the purpose by the University Court of the University of Edinburgh.

III. Candidates must be matriculated for the year in which they appear for examination or graduation.

(A.)—*First Examination.*

IV. Candidates for the degree of Bachelor of Science in Public Health before proceeding to the first examination, must produce evidence (1) that, after their graduation in Medicine, they have worked for at least twenty hours per week during a period of not less than eight months, of which at least five consecutive months must be in the Public Health Laboratory of the University of Edinburgh, and the remainder in the foresaid Laboratory, or in a Public Health Laboratory recognised for the purpose by the University Court;[1] and (2) that they have

[1] *Public Health Laboratories and Teachers recognised under this section :—*

Public Health Laboratory of Mason's College, Birmingham,	E. Percy F. Frankland, Ph.D., October 1894.
Liverpool School of Science and Technology,	George Tate, Ph.D . 15 June 1891.
King's College, London, ...	W. R. Smith, M.D., D.Sc., November 1891.
University of Aberdeen, ...	Professor Matthew Hay, M.D., 15 February 1891.
Pasteur's Institute, Paris, ...	22 October 1892.

attended, either before or after graduation in Medicine, such courses of lectures on (*a*) Physics and (*b*) Geology, either in the University of Edinburgh or elsewhere, as would qualify for graduation in Science or Arts in the said University.[1]

(B.)—*Second Examination.*

V. Candidates for the degree of Bachelor of Science in Public Health are not admitted to the second examination for the degree sooner than eighteen months after having taken their degree in Medicine, nor sooner than six months after having passed their first examination for the degree of Bachelor of Science in Public Health, and they must have attended a course of instruction, consisting of fifty lectures at least, on Public Health in the University of Edinburgh, or in any University of the United Kingdom, or any Indian, Colonial, or Foreign University recognised for the purpose by the University Court, or in such Medical School or under such teacher as may be recognised or approved for the purpose by the University Court.[1]

They must also give evidence (1) that for six months they have practically studied sanitary work under the Medical Officer of Health of a county or burgh or district, containing a population of not less than 25,000; (2) that they have had three months' clinical instruction regarding fevers and infectious diseases in a hospital recognised as suitable for the purpose by the University Court; and (3) that they have had three months' instruction in Mensuration and Drawing under a teacher recognised for the purpose by the University Court.

VI. There is a first examination for the degree of Bachelor of Science in Public Health in (1) Laboratory Work, the examination being practical, written, and oral; (2) in Physics; and (3) in Geology, if an examination in Physics or Geology, as the case may be, qualifying for graduation either in Science or Arts has not previously been passed by the candidate.

VII. There is a second examination, written, oral, and as far as possible practical, for the degree of Bachelor of Science in Public Health in the following subjects, included in the course of instruction in Public Health—viz. (1) Sanitation,[1] (2) Sanitary Law, (3) Vital Statistics, and (4) Medicine in its bearings on Public Health, and the examinations in these subjects are taken at one time.

VIII. The Board of Studies for the Faculty of Science from time to time, with the approval of the Senatus, determines and announces the character of the instruction to be given in the Laboratory, and fixes the standard of the examinations.

IX. It is competent for the University Court, after consultation with the Senatus, to modify from time to time the provisions as to the work and instruction hereinbefore specified as necessary for graduating in

[1] See Supplementary Ordinance Appendix, page 24.

Science in Public Health, in case such modification may be rendered desirable by the development of the Science of Public Health, or by increase of the facilities provided in the said University or elsewhere for the study of any branch of the said Science.

Schedules of the Subjects of Examination.

Laboratory Work.

(1.) *Examination of Water.*—Physical Properties, Chemical Properties, Microscopical Appearances, Pollution of Potable Waters.

(2.) *Examination of Air.*—Temperature, Pressure, Humidity; Carbonic Acid, Ozone, Micro-organisms, Organic Matter, Noxious Emanations.

(3.) *Examination of Foods.*—Milk, Butter, Butterine, or Oleomargarine, Flour, Bread, Starchy foods, Sugar, Honey, Butcher meat, Fish, Vegetables.

(4.) *Examination of Beverages.*—Tea, Coffee, Cocoa, Alcoholic Beverages, Aërated Waters.

(5.) *Examination of Condiments.*—Salt, Pepper, Mustard, Vinegar, and Preserves; Examination of Lime Juice. Nutritive Value of Dietaries.

(6.) *Sewage.*—Examination of sewage and of effluents after treatment.

(7.) *Soils.*—Temperature, Humidity, Permeability, Chemical Composition, Gases of the Soil, Micro-organisms.

(8.) *Disinfectants and Deodorisers.*—Chemical Examination of the Materials, Determination of their comparative power.

(9.) *Building Materials.*—Chemical and Physical Properties.

(10.) *Clothing.*—Physical Properties of Clothing Materials.

(11.) *Bacteriology.*—Micro-organisms in relation to Epidemic and other Diseases. Culture and recognition of Pathogenic and Non-Pathogenic, Aerobic and Anaerobic, Micro-organisms.

Physics.

(1.) *Laws of Motion and Properties of Matter.*—Elasticity, Density, Porosity, Divisibility, Viscosity, &c.

(2.) Elements of Dynamics of Solid and Fluid Bodies.

(3.) Elementary Experimental Facts regarding Energy in the common phenomena of Sound, Light, Heat, Electricity, and Magnetism.

(4.) *Elements of Astronomy.*—Causes of Tides, Eclipses, Aberration, Precession, &c.

Geology.

(1.) *Dynamical Geology.*—The nature and operation of Geological agents:—Rain, Underground Water, Rivers, Ice, the Sea, Earthquakes, Volcanoes, Movements of Upheaval and Depression.

(2.) *Mineralogy and Petrology.*—Characters of the more common and widely-distributed minerals and rocks.

(3.) *Structural Geology.*—The structure of rock-masses, more especially Bedding, Joints, Faults, Intrusive Rocks. Water-supply and Draining in connection with Geological Structure. Nature and Origin of Soils and Sub-Soils.

MEDICINE IN ITS APPLICATION TO PUBLIC HEALTH.

The General Pathology of Endemic, Epidemic, and other morbid Processes induced by Environment.

The Causes and Prevention of Endemic and Epidemic Diseases, as well as of Epizootics; of the Contagious or Infectious Diseases; and of those incidental to particular trades, or otherwise produced by the surroundings of the patient. Prophylaxis. Immunity,—conferred and acquired. Vaccination against disease. Nature and Value of Vaccines.

SANITATION.

(1.) *Site and Environment of Dwellings.*—Influence of Position, Aspect, and Climate; Meteorological and Geological Conditions; Soil and Drainage.

(2.) *Water Supply.*—Quantity per head; Relative Eligibility of available Sources of Supply; Estimation of yield; Methods of utilising various Sources of Supply; Storage, Subsidence, and Filtration; Distribution—(α) General, (β) Domestic; Causes, Detection, and Treatment of contaminated Supply.

(3.) *Air Supply.*—Quantity and Temperature, with knowledge of use of instruments employed in their Measurement; Causes and Detection of Impurities; Warming and Ventilation; Characteristics and Fitness of various methods in use.

(4.) *Excreta, Refuse, and Sewage.*—Character and Quantity of in (α) Urban, (β) Rural Districts—

A. Collection and Removal from (1) the Dwelling, (2) the Town or Village; Nature, Practical details, and maintenance of the several methods employed.

B. Disposal: (1) Sanitary, (2) Insanitary methods; Precipitation, Filtration, Irrigation, Discharge; General details of necessary works.

(5.) *General Structural and Mechanical Details of Sanitary Works.*—Character, Fitness, and Qualities of Materials (Brick, Cement, Earthenware, Iron, Lead); Design, setting out, and laying of Sewers; Plumbing and Iron-work.

(6.) *Hospitals.*—Principles of Design and Construction.

(7.) *Infectious and Epidemic Diseases.*—Origin, Modes of Propagation, and Means of Prevention; Epizootics.

(8.) *Disinfectants.*—Selection and application.

(9.) *Effects of Insanitary Conditions.*—Insufficient house accommodation, Vitiation of Air, Impure Water, Bad or insufficient Food.

(10.) *Unhealthy Occupations.*—Means of mitigating or removing their unhealthiness.

(11.) *Nuisances.*—Urban, Rural, and Domestic.

(12.) *Disposal of the Dead.*—Burial, Cremation.

N. B.—Candidates are required to be able to interpret plans submitted to them, and to illustrate their answers when necessary by sketch plans and diagrams drawn to scale.

SANITARY LAW.[1]

Sanitary Administration. Laws affecting Factories, Workshops, Mines, Common Lodging-houses, Removal of Refuse, Nuisances, Rivers Pollution, Alkali Works, Burial Grounds, Unwholesome Food, Adulteration of Food and Drugs. Sale of Poisons.

VITAL STATISTICS.

Leading facts as regards Population, Birth and Death Rates, Distribution of Diseases.

II.—DOCTORATE OF SCIENCE.

X. Graduates who have held the degree of Bachelor of Science in Public Health from the University of Edinburgh for a term of five years, may offer themselves for the degree of Doctor of Science in Public Health in the said University.

XI. Candidates for the degree of Doctor of Science in Public Health must present a thesis, or a published memoir or works, to be approved by the Senatus, on the recommendation of the Faculty of Science, and are required to pass an examination in Public Health, and in such of its special departments as the Senatus, with the approval of the University Court, by regulations framed from time to time, may determine.

The theses, or published memoirs or works, must be records of original research undertaken by the candidates, and must be accompanied by a declaration, signed by them, that the work has been done and the theses or memoirs composed by themselves.

GENERAL.

XII. Candidates who produce certificates that they have satisfied all the conditions prescribed by this Ordinance, and who have passed the necessary examinations, are entitled to receive the degrees of Bachelor of Science in Public Health and Doctor of Science in Public Health, as the case may be, on payment of the fees required.

XIII. Students who, at the time when this Ordinance comes into operation, have completed a part of their course of study with a view

[1] A knowledge of the Sanitary Law of any part of the British Dominions will be sufficient.

to graduation in Science in Public Health in the University of Edinburgh, under regulations in force at the time therein, and thereafter completes the course of study and passes the necessary examinations in conformity with such regulations, or with the provisions of this Ordinance, may become candidates for the degree of Bachelor of Science in Public Health.

XIV. The degrees of Bachelor and Doctor of Science in Public Health are in no case conferred on persons who have not complied with the conditions hereinbefore set forth, and are not conferred *honoris causâ tantum.*

IV.—AGRICULTURE.

D.—Regulations and Curriculum applicable to all who commence attendance on Science Classes after 1st October 1893.

For those who commenced attendance on Qualifying Science Classes before 1st October 1893, *see Regulations H, page* 444.

I. A degree of Bachelor of Science in Agriculture is conferred by the University of Edinburgh.

I. Preliminary Examination.

II. Every candidate for the degree of Bachelor of Science in Agriculture must pass the Preliminary Examination[1] prescribed for Degrees in Pure Science; and the conditions imposed with respect thereto by the said Regulations are applicable in all respects to the Degree in Agriculture, except as follows:—The Preliminary Examination must be passed before the candidate presents himself for any part of the First Science Examination, but not necessarily before the candidate enters on his curriculum.

Courses of Instruction.

III. (1) Candidates must in the course of not less than three Academical years (*i.e.* three Winter Sessions, or two Winter Sessions and three Summer Sessions), attend at least eleven courses of instruction in subjects prescribed for examination under Section VIII. hereof.

(2) It is the duty of the Senatus to determine from time to time which of the said courses are full courses and which are half courses respectively, and also to determine the number of meetings of which such full courses and half courses respectively shall consist, and to report its determination to the University Court for its approval.

IV. (1) Five full courses or their equivalent (counting two half courses as one full course) must be taken in the University of Edinburgh, and must include the course in Agriculture and Rural Economy.

[1] See page 403.

(2) The remainder of the said courses may be taken in other Universities or Institutions approved by the University Court, or under teachers recognised by the University Court for purposes of graduation in Science in Agriculture :[1] Provided that the fees for attendance at an approved Institution in Edinburgh or under a recognised teacher there must not be less than the fees exigible for the corresponding courses in the University of Edinburgh.

(3) Residence and practical work at a farm is required of each candidate to such an extent and under such regulations as the Senatus, with the approval of the University Court, may from time to time appoint.

V. The University Court may make regulations to enable candidates, not matriculated students of the University of Edinburgh, availing themselves of the permission to attend lectures at approved Institutions or by recognised teachers in Edinburgh, to obtain, on payment of a fee not exceeding in amount the matriculation fee paid by the students of the University, a right to the use of the Library of the University.

VI. (1) It is the duty of the Professors and Lecturers annually, at the end of each winter session, to submit to the Senatus a scheme specifying what proportion of the courses is to be devoted to lectures, practical demonstrations, examinations, and tutorial work respectively. The Senatus transmits such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

(2) It is the duty of the Professors and Lecturers annually at the end of each winter session to submit to the Faculty of Science, for its consideration, a syllabus of the subjects and books proposed for the work of their classes during the next Academical year. The Faculty of Science transmits such syllabus, with such observations as it may think fit to make thereon, to the Senatus for its approval.

VII. The provisions of the preceding section does not apply to approved institutions or recognised teachers outside Edinburgh; but the University Court will not grant or continue recognition to any Institutions or teachers unless it is satisfied that their courses of instruction are equivalent to the courses sanctioned in the University of Edinburgh, where such exist.

VIII. The subjects of study are as follows :—

1. Mathematics, or Biology (*i.e.* Zoology and Botany).
2. Natural Philosophy.
3. Chemistry.
4. Agriculture and Rural Economy.
5. Agricultural Chemistry.
6. Geology.
7. Veterinary Hygiene.

[1] See footnote, p. 404.

8. Agricultural Entomology.
9. Economic Science as applied to Agriculture.
10. A course in one of the following :—
    (*a*) Forestry.
    (*b*) Experimental Physics.
    (*c*) Engineering.
11. Engineering Field Work.

II. Science Examinations.

(*a*) *First Science Examination.*

IX. (1) There is a First Science Examination in the three following subjects—viz. (1) Mathematics, or Biology (*i.e.* Zoology and Botany) ; (2) Natural Philosophy ; (3) Chemistry.

(2) The examination in all these subjects is the same as the examination in these subjects for the degree of Bachelor of Science in Pure Science, as specified in the Regulations therefor.

The following courses in this University qualify for the First Science Examination in Agriculture :—

1. (1) Senior Mathematics of 100 Lectures, as for the degree in Pure Science, or (2) Biology (Zoology, Botany) as for Pure Science.
2. Natural Philosophy, as for Pure Science.
3. Chemistry, full course, as for Pure Science.

(3) Candidates may present themselves in any one or more of the subjects of the First Science Examination at any examination held after they have attended a full course in the subject or subjects professed.

(*b*) *Final Science Examination.*

X. (1) There is a Final Science Examination in the remaining subjects (4 to 11 inclusive) specified in Section VIII. hereof.

(2) Candidates may present themselves in any one or more of these subjects at any examination held after they have passed the whole of the subjects comprised in the First Science Examination, and have attended the required courses in the subjects professed.

The following courses qualify for the Final Science Examination in Agriculture :—

1. Agriculture and Rural Economy—Full course of about 100 Lectures and 10 Field Demonstrations.
2. Agricultural Chemistry—Full course of about 100 hours, including practical work in the Laboratory.

3. Geology—Half-course of 25 Lectures, 10 Demonstrations in Laboratory, and 8 Field Demonstrations.
4. Veterinary Hygiene—Half-course of about 50 Lectures.
5. Agricultural Entomology—Half-course of about 20 hours.
6. Economic Science, as applied to Agriculture—Half-course of about 40 Lectures—the Political Economy Class in Arts till Christmas.
7. A course in one of the following:—
   (*a*) Forestry—Full course of about 100 Lectures.
   (*b*) Experimental Physics — Full Laboratory course of 100 hours.
   (*c*) Engineering—Full course of about 100 hours.

8. Engineering Field Work:—Half-course, extending over three weeks, 75 hours—Lectures, Drawing Office, and Field.

XI. If a student, before passing the Preliminary Examination, has attended a class qualifying for graduation, the Senatus may, on special cause shown, permit him to count such class for graduation, on condition of his passing the full Preliminary Examination within such time thereafter as the Senatus may appoint, and in every such case the Senatus reports to the University Court the reasons for the relaxation.

XII. A candidate for the degree of Bachelor of Science in Agriculture shall not be deemed to have attended a class as part of the curriculum for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

General.

XIII. Candidates who produce certificates that they have satisfied all the conditions prescribed by these Regulations, and who have passed the necessary examinations, shall be entitled to receive the degree of Bachelor of Science in Agriculture, on payment of the fees required.

XIV. A student who, at the time when these Regulations shall come into operation, shall have completed a part of his course of study with a view to graduation in Science in Agriculture in the University of Edinburgh, under regulations in force at the time therein, and shall thereafter complete his course of study and pass the necessary examinations in conformity with such regulations, or with the provisions of these Regulations, may become a candidate for the degree of Bachelor of Science in Agriculture.

XV. The degree of Bachelor of Science in Agriculture shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causâ tantum*.

OUTLINE OF SUBJECTS OF EXAMINATION.

FIRST BACHELOR OF SCIENCE EXAMINATION.

1. (*a*) MATHEMATICS, or (*b*) BIOLOGY (*i.e.* ZOOLOGY and BOTANY).
2. NATURAL PHILOSOPHY.
3. CHEMISTRY (not including Practical Chemistry).

The Examinations are the same as for the First B.Sc. in Pure Science.

FINAL BACHELOR OF SCIENCE EXAMINATION.

1. AGRICULTURE AND RURAL ECONOMY: ITS SCIENTIFIC PRACTICE.

1. *Definition of Agriculture.*—Aid given by the Allied Sciences.

2. *Surface Geology.*—Formation and Classification of Soils—their Physical and Chemical Properties. Importance of Organic Nitrogen. Indications of good or bad Soils—the different Methods of Management.

3. *Drainage.* — Its Practice and Advantages — Irrigation—Wet-Warping — Mixing or Top-Dressing—Claying—Marling—Chalking—Liming—Paring and Burning—Clay-Burning. The Effect on Soils of Cultivation and the Growth of Plants.

4. *Implements and Machines of the Farm.*—The Importance of their proper Construction and Careful Management.

5. *Steam Cultivation.*—Its Advantages and Disadvantages.

6. *The Motive Powers Employed on the Farm.*—1st, Man; 2d, Horse; 3d, The Mechanical Powers (Water, Wind, and Steam)—their Comparative Values and Advantages.

7. *Farm Servants.*—Their Labour and Wages — Day-work and Piece-work. Detailed and total costs of Horse and Hand Labour.

8. *The Importance of Rotations.*—Different Rotations and reasons why they are adopted—Systems of Farming.

9. *Our Farm Crops* (Grain, Root, Forage, and Hay Crops).—Their Selection and Growth—Prevention of Insect Injuries and Diseases.

10. *Identification of Grasses and other Valuable Pasture Plants.*—Character and Habits of those of importance—Detection of Adulterations.—Regulations necessary to protect the Farmer in buying Seeds.

11. *The Management of Permanent Pasture.*—Proper Methods of making new Pasture—its After-treatment.

12. *Weeds in Pastures* and Means of Destroying them.

13. *Silage and the System of Ensilage.*—Its Advantages, &c.—Its Suitability and Unsuitability according to Locality.

14. *Manures.*—Farm-yard Manure — its proper Mixing, Storing, and Application—its great advantage as a General Manure. Special Manures and so-called Artificials — their Uses, Abuses, and Adulterations — the proper Times and Methods of their Application. The Value and Use of Liquid Manure and Town Sewage.

15. *Buildings and Fences.*—The proper Construction of Fences—the General Arrangement of Farm-Buildings—the best Flooring and Inside Plans and Dimensions of Byres, Cattle-Sheds, Stables, &c.—Covered Yards—Ventilation—Drainage of Houses and Farm-yards.

16. *Live-Stock, embracing Cattle, Pigs, Horses, Sheep*—The Various Breeds of each, and suitability of some to Local Conditions—"The Principles of Breeding." Feeding and Management—Cost of Feeding—Proper Mixtures of Food to Use. Cost of the Production of a Stone of Beef, Mutton, and Pork, showing the Amount of Profit in each Case.

17. *Dairying in all its Branches*, including the suitability or otherwise of surrounding Conditions—the proper Classes of Dairy Stock to keep, and their Management—the Treatment of Milk, and its Sale or Manufacture into Cheese, Butter, &c.

18. *Feeding Stuffs*—Suitability of the Common Food Substances to the Different Classes of Farm Stock—The Purchase, Storing, and Administration of the same—their Manurial Residues.

2. Agricultural Chemistry.

1. *Atmosphere.*—Relation of its Constituents and Conditions to Plant Life.

2. *Soils.*—Origin, Formation, Composition, Biology, Amelioration.

3. *Plants.*—Constituents, Germination, Nutrition, Maturation, Symbiosis.

4. *Manures.*—Nature, Uses, Application, Valuation, Compatibility, Exhaustion.

5. *Crops.*—Classification, Relation, Preservation, Uses as Fodder, Residual Value.

6. *Animal Nutrition.*—Nutritive Processes, Laws of Flesh and Fat Production, Digestibility of Fodders, Nutrient Ratio, Relation of Food to Work and to Manure.

7. *Dairy.*—Composition of Dairy Products, Circumstances affecting Quantity and Quality, Scientific Management.

(*a*) *Qualitative Analysis.*

Tests for the detection of Potassium, Sodium, Ammonium, Magnesium, Calcium, Aluminium, Iron, Arsenic, Antimony, Copper, Lead, Mercury.

Sulphate, Sulphite, Sulphide, Phosphate, Carbonate, Nitrate, Chloride, Acetate, Oxcilate, Tartrate.

Sugars, Starches, Fats, Proteids.
Chemical, Physical, and Microscopic Tests for Adulteration in Manures, Feeding Stuffs, and Dairy Produce.

(*b*) *Quantitative Analysis.*

Determination of Clay, Sand, Carbonates, Humus, and Moisture in Soils.
Phosphoric Acid, Potash, Nitrogen, Lime, Magnesia, Insoluble Matter and Moisture in Soils and Manures.
Albumen, Amides, Fat, Carbohydrates, Woody Fibre, and Ash in Fodders.

3. Geology.

(1.) *Physical Geography and Dynamical Geology.*—The nature and operation of Geological agents:—Rain, Underground Water, Rivers, Ice, the Sea, Life, Earthquakes, Volcanoes, Movements of Upheaval and Depression.

(2.) *Mineralogical and Petrological Geology.*—Characters of the principal Rock-forming Minerals; Composition, Origin, and Distribution of the more important and commonly occurring Rocks.

(3.) *Structural Geology.*—The Structure of Rock-masses, more especially Bedding, Joints, Faults, and Denudation.

(4.) *Agricultural Geology.*—Nature and Origin of Soils and Subsoils; Draining in connection with Geological Structure; Mineral substances used as Manures.

4. Veterinary Hygiene.

1. The Comparative Osteology (rudimentary) of the Horse, Ox, and Sheep.

2. The Physiology of Dentition in Horse, Ox, Sheep, and Pig, more especially as indicative of the Age of the Animal.

3. The Physiology of Gestation; the Diseases incidental to the pregnant state, and also those consequent to the act of parturition.

4. Description of the Digestive Organs of the Horse, Ox, and Sheep (separately), also their Physiology, and most ordinary Diseases.

5. Contagious and other Diseases of Farm Stock. Prevention and Treatment of Diseases.

5. Agricultural Entomology.

Insect pests of cultivated plants and of farm live stock. Methods of prevention of, and of remedy for, their attacks. Classification of insects, and details of their structure and life history, in so far as of economic importance.

6. Economic Science as applied to Agriculture.

1. The Food Supply of the United Kingdom. 2. The Wages of Agricultural Labour. 3. The Profits of the Farmer. 4. The Rent of Land and Causes of Variations in Rent. 5. Contracts for the Hire of Land. 6. The Risks of Long Leases. 7. Compensation for Improvements. 8. Fixity of Tenure and its Effects. 9. The Prices of Agricultural Produce. 10. Foreign Competition. 11. Effects of the Appreciation of Gold and the Depreciation of Silver. 12. Effects of various Imperial and Local Taxes on Agriculture.

7 (*a*). Forestry.

1. *Sylviculture.*—Atmosphere, Climate, and Soil, as affecting Forest Vegetation; shape and development of forest trees; pure and mixed woods; the sylvicultural systems; formation and tending of woods.

2. *Injuries to Standing Woods and their Protection.*—Storms, fires, animals, fungi.

3. *Utilisation of Produce.*

4. *Structure, Classification, and Technical Properties of Timber.*

5. *Forest Organisation.*—The principles on which working plans are based.

6. *Uses and Effects of Forests.*

7 (*b*). Experimental Physics.

The Measurement of Physical Constants, such as—Force of Gravity, Specific Gravity, Specific Heat, Conductivity, Dilatation, Refractive Index, Magnetic and Electric Quantities, &c.

7 (*c*). Engineering.

1. *Mechanics.*—(*a*) Principles of Statics; couples; moments of forces; parallel and inclined forces; centre of gravity; moments of inertia; friction. (*b*) Principles of Kinematics and Kinetics; Newton's laws of motion; Conservation and transformation of energy.

2. *Strength and Properties of Structural Materials*, including their fitness and adaptability, together with some knowledge of their cost.

3. *Strength and Stability of Structures.*—General knowledge of the design, construction, and maintenance of Roads, Roofs, Bridges, Embankments, Retaining Walls, Aqueducts, and General Buildings.

4. *Hydraulics.*—The laws governing the flow of water in open and closed channels, and its discharge through orifices; Systems of Drainage and Irrigation; Pumps, &c.

5. *Mechanism and Machinery.*—General Principles and means of transmission, conversion, and modification of motion; general millwright work with special reference to the machines ordinarily employed for agricultural purposes.

6. *Prime Movers.*—A knowledge of the sources and modes of estimating power; The Steam Engine; Pneumatic Machines; Hydraulic Motors, Water-wheels, Turbines, &c.

8. Engineering Field Work.

Surveying, with special reference to Estate and Parish Surveying, Levelling, Gauging of Streams and Rivers, Plotting of Surveys and Sections, Setting out of Work, and Calculation of Quantities.

GRADUATION IN SCIENCE UNDER THE OLD REGULATIONS.

Two Degrees in Science are conferred by the University of Edinburgh, viz. :—Bachelor of Science (B.Sc.), and Doctor of Science (D.Sc.). These Degrees are conferred in Physical and Natural Science, in Engineering, and in Public Health. In Agriculture the Degree of B.Sc. only is conferred. Candidates should apply to *the Dean of the Faculty of Science* for information with reference to these Degrees.

The Degrees in Science are conferred at the Graduation Ceremonials in April and August.

I.—DEGREES OF BACHELOR AND DOCTOR OF SCIENCE IN THE DEPARTMENT OF PHYSICAL AND NATURAL SCIENCE.

E.—REGULATIONS FOR GRADUATION IN PHYSICAL AND NATURAL SCIENCE, APPLICABLE TO ALL WHO COMMENCED ATTENDANCE ON SCIENCE CLASSES BEFORE 1ST OCTOBER 1892.

PRELIMINARY EXAMINATION.

1. Candidates for Degrees in Physical and Natural Science must, unless exempted, pass a Preliminary Examination in English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and in at least two of the following subjects :—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, and Moral Philosophy.

The Preliminary Examinations in General Education are held in the Examination Hall in the University. See Outline of Subjects of Examination, page 403, and Time-Table of Examinations, and Regulations as to Entering for Examination and Payment of Fees, page 447.

The Fee for the Examination or for Registration of qualification is £1, 1s.

EXEMPTIONS FROM THE PRELIMINARY EXAMINATION.[1]

A Degree in Arts in any one of the Universities of the United Kingdom, or in one of the Colonial Universities, or

[1] For other Examinations which exempt from the Preliminary Examinations under the old Regulations, apply to the *Dean of the Faculty of Science*, and see CALENDAR for 1892-93 and previous CALENDARS.

Universities of British India, exempts from the Preliminary Examination.

(*a.*) Bachelors or Masters of Arts, by Examination, of British or recognised Indian or Colonial Universities.

(*b.*) Bachelors or Doctors of Medicine of British or recognised Indian or Colonial Universities.

(*c.*) Holders of two Departmental Certificates in the Faculty of Arts of this University.

(*d.*) Candidates who have passed in this University the Entrance Examination for Curriculum of Three Sessions for Degrees in Arts in Latin, Greek, and Mathematics, are exempted from the Preliminary Examination in Latin, Arithmetic, and Elements of Mathematics, and are held to have passed in Greek and Higher Mathematics as optional subjects.

(*e.*) Matriculated Students of the University of London.

(*f.*) Students who have been admitted by Examination to the Royal Indian Engineering College, Cooper's Hill, and who have obtained 50 per cent. of the marks in Latin or in Greek in the Competitive Examination for entrance to that College. Should such Students not bring evidence of having obtained 50 per cent. in either of these subjects, they will be required to pass the Preliminary Examination in Latin.

(*g.*) Holders of Certificates of having passed the Leaving Examinations of the Universities of Oxford and Cambridge when certified as equivalent to a pass in Responsions at Oxford and the First Examination at Cambridge.

2. Candidates must produce evidence of having passed the Preliminary Examination and of attendance on qualifying Classes embracing all the subjects included in the Science Examination which they purpose to undergo.

3. The attendance on Science Classes for the Degree of Bachelor of Science must extend over three Academic years, one of which must be passed at the University of Edinburgh, the other two years either at this University, or at Universities or Institutions [1] recognised by and approved by this University; Classes of Chemistry, of Practical Chemistry, of Botany, and of Zoology, which are recognised for the First Professional Examination for Degrees in Medicine, are also recognised for the First Bachelor of Science Examination.

4. Each Academic year must be constituted by attendance on Science Classes during at least two full courses during one winter session, or one such course and two full courses during

[1] Only Institutions possessing the necessary staff and appliances for Theoretical and Practical Instruction in Science will be recognised by the University. For Universities and Institutions at present recognised, see page 405.

a summer session. Work in a scientific laboratory extending over a period of not less than five months will be reckoned equivalent to a full winter course of lectures, and work in a scientific laboratory extending over a period of three months will be reckoned equivalent to a full summer course of lectures.

5. Every Candidate for a Degree in Science must produce his Matriculation Ticket for the year in which he appears for Examination or Graduation.

6. Candidates for Graduation who have previously passed the Examinations are required to intimate to the Clerk to the Senatus their intention to Graduate, and pay the fee at least ten days before the date of Graduation. Those whose Examinations are not then completed are required to give such intimation at the earliest possible date, and at latest one clear day before the day of Graduation.

EXAMINATIONS.

For the Degree of Bachelor of Science, there are two Examinations conducted by written questions as well as orally and practically.

(*a.*) FIRST BACHELOR OF SCIENCE EXAMINATION.

1. The First Examination for B.Sc. is as to the general knowledge of the Candidate on the following subjects, viz. :—

MATHEMATICS.	ZOOLOGY, including COMPARATIVE ANATOMY.
NATURAL PHILOSOPHY.	BOTANY.
CHEMISTRY.	

2. The Examinations are the same as in the corresponding subjects of the First Science Examination under the new Regulations for Graduation in Pure Science.

3. Masters of Arts who have taken honours in the Natural Sciences after passing the Examinations for M.A. in this University are exempted from the First Bachelor of Science Examination on payment of the Fees.

4. Holders of departmental certificates in the Department of Mathematics in this University are exempted from Examination in Mathematics and Natural Philosophy.

5. Candidates who have passed the First Professional Examination for Degrees in Medicine in this University are exempted from Examination in Chemistry, Zoology, and Botany.

(*b.*) SECOND BACHELOR OF SCIENCE EXAMINATION.

1. The Second B.Sc. Examination is divided into the following groups, one of which must be professed by the candidate:—

(*a.*) THE MATHEMATICAL SCIENCES, .	{ Higher Mathematics. Natural Philosophy,
(*b.*) THE PHYSICAL EXPERIMENTAL SCIENCES, ...	{ Experimental Physics, Chemistry.
(*c.*) THE NATURAL SCIENCES, . .	{ Zoology, Botany, Physiology, Geology.

2. The Examinations are the same as in the corresponding subjects for the Final Examination in Pure Science under the new Regulations.

3. Candidates may proceed to the Second B.Sc. Examination at the next periodical Examination after passing the First.

4. Candidates who have passed the First B.Sc. Examination, and have taken Honours in the Department of Mathematics for the Degree of M.A. in this University, are exempted from the Second B.Sc. Examination in the Department of the Mathematical Sciences on payment of the Fees.

(*c.*) DOCTORATE OF SCIENCE (*see pages* 407 *and* 410).

II.—ENGINEERING.

F.—REGULATIONS FOR GRADUATION IN SCIENCE IN ENGINEERING, APPLICABLE TO ALL WHO COMMENCED ATTENDANCE ON QUALIFYING SCIENCE CLASSES BEFORE 1ST OCTOBER 1893.

The Degrees of *Bachelor of Science* and *Doctor of Science* are open to candidates submitting themselves for examination in Engineering according to the subjoined Rules.

1. Candidates for Degrees in Engineering must, unless exempted, pass a Preliminary Examination in English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and in at least two of the following subjects:—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, and Moral Philosophy.[1]

2. Candidates must also produce evidence of attendance on qualifying Classes, embracing all the subjects included in the Examination which they purpose to undergo.

3. The attendance on Science Classes for the Degree of Bachelor of Science must extend over three Academic years, one of which must be

[1] The Preliminary Examination is the same as in the corresponding subjects under the new Regulations. See page 403. For exemptions under the old Regulations, apply to the *Dean of the Faculty of Science*, and see CALENDAR for 1892-93, and previous CALENDARS.

passed at the University of Edinburgh, the two other years either at this University, or at Universities or Institutions[1] recognised by and approved by this University. Classes of Chemistry, and of Practical Chemistry, which are recognised for the First Professional Examination for Degrees in Medicine, are also recognised for the First Bachelor of Science Examination.

4. Each Academic year must be constituted by attendance on Science Classes during at least two full courses during one winter session, or one such course and two full courses during a summer session. Work in a scientific laboratory extending over a period of not less than five months will be reckoned equivalent to a full winter course of lectures, and work in a scientific laboratory extending over a period of three months will be reckoned equivalent to a full summer course of lectures.

5. Every candidate for a Degree in Science must produce his Matriculation Ticket for the year in which he appears for Examination or Graduation.

6. Candidates for Graduation who have previously passed the Examinations are required to intimate to the Clerk to the Senatus their intention to Graduate, and pay the fee at least ten days before the date of Graduation. Those whose Examinations are not then completed are required to give such intimation at the earliest possible date, and at latest one clear day before the day of Graduation.

7. There are two examinations for the Degree of Bachelor of Science. The examinations are written, oral, and practical.

8. The first examination is as to the general knowledge of the candidate on the following subjects, viz. :—

MATHEMATICS.
NATURAL PHILOSOPHY.
CHEMISTRY.

The examinations are the same as the first examination in these subjects for Degrees in Pure Science.

9. This examination is called the *First Bachelor of Science Examination in Engineering*, and candidates, who have passed the Preliminary, may appear for it at the first period of Examination subsequent to their attendance on the necessary classes. It may be taken at one or two Examinations: (*a*) Mathematics and Physics must be taken together; (*b*) Chemistry (including Practical Chemistry).

10. Candidates who have passed the *First Bachelor of Science Examination* (or who have been exempted from it), may proceed to the *Second Bachelor of Science Examination* at the next periodical Examination after passing the First.

11. For this Examination each Academic year must be constituted by attendance on Science Classes during at least two full courses during

[1] See footnote, page 404

one Winter Session, or one such course and two full courses during a Summer Session.

The Second B.Sc. Examination will be in the following subjects :—

DYNAMICS.
ENGINEERING.
DRAWING.

12. Candidates, after passing the Second Examination, and otherwise complying with the Regulations for Graduation, will be recommended to the Senatus for the Degree of Bachelor of Science on their giving at least one day's notice of their intention to graduate.

DOCTORATE OF SCIENCE. (*See page* 419).

FIRST BACHELOR OF SCIENCE EXAMINATION.

OUTLINE OF SUBJECTS OF EXAMINATION.

(*a.*) MATHEMATICS.
(*b.*) NATURAL PHILOSOPHY.
(*c.*) CHEMISTRY—

The Examinations in Mathematics, Natural Philosophy, and Chemistry are the same as for First B.Sc. in Pure Science.

SECOND BACHELOR OF SCIENCE EXAMINATION.

(*a.*) DYNAMICS—

The Applications of Mathematics (as far as the Elements of the Differential and Integral Calculus) to

Kinematics.

Statics of Rigid Solids, Elastic and Perfectly Flexible Bodies, and Perfect Fluids.

Kinetics of a Particle, of a Flexible Cord, and of a Rigid Solid.

The Simpler Portions of Elasticity of Solids and Kinetics of Perfect Fluids.

(*b.*) ENGINEERING—

Field-Work.—Surveying; Levelling; Setting out of Work; Calculation of Quantities.

Properties of Materials.—General Properties, with special knowledge of their Strength, and the Purposes to which they are applied, and some knowledge of their Cost.

Strength and Stability of Structures designed by Civil Engineers.—Metal and Timber Bridges and Roofs. Arches in Masonry. Walls. Retaining Walls. Embankments. Cuttings. Breakwaters. Aqueducts. Pipes. Canals.

Strength and Form of the Elements of Machines.

Design of Combined Structures.—An elementary knowledge of the Design of Bridges and Roofs, of Reservoirs, Embankments, collecting and distributing Machinery of Water-

works, and of the main features of Railway construction, Harbours, and Drainage.

Design of Machinery.—An elementary knowledge of the construction of the Steam Engine, stationary and locomotive, of Prime Movers driven by Water, of Mill-wright work, and the general arrangement of Workshops and Factories.

Prime Movers.—Theory of Heat Engine. The Hot Air Engine. The Steam Engine. The Gas Engine. Turbines and Water Wheels. *Power Transmission*—Telodynamic, Hydraulic, Electric.

(*c.*) Drawing—

Candidates must exhibit a good knowledge of Geometrical Drawing, and be able to represent neatly, in the usual manner employed by Engineers, Plans and Sections of Buildings and Machinery, and also to make Engineering Sketches with figured dimensions from actual objects.

III.—PUBLIC HEALTH.

G.—Regulations for Graduation in Science in Public Health, applicable to all who commenced attendance on Science Classes before 1st October 1894.

Two Degrees in Science in the Department of Public Health are conferred by the University of Edinburgh, viz., Bachelor of Science (B.Sc.) and Doctor of Science (D.Sc.).

I. BACHELOR OF SCIENCE.

1. Every Candidate for Graduation in Science in the Department of Public Health must be a Graduate in Medicine of a University of the United Kingdom, or of a Colonial, Indian, or Foreign University specially recognised by the University Court.

2. Every Candidate must be matriculated for the year in which he appears for examination or graduation.

3. There are two Examinations for the Degree of Bachelor of Science in the Department of Public Health.

4. Every Candidate who desires to proceed to the first examination for the said Degree must produce evidence—(*a*) that he has taken a Degree in Medicine in the University of Edinburgh, or in a University recognised under section 1 hereof; (*b*) that he has worked for at least six months, or the usual winter session, in a Laboratory where practical instruction is given in the methods of investigating subjects pertaining to Public Health. This course must be attended, after Graduation in Medicine, either in the Public Health Laboratory of the University of Edinburgh, or in a Laboratory in which instruction in Public Health is given, and which has, after due enquiry, been recognised by the University Court.[1]

[1] See footnote, page 422.

5. Laboratories are not recognised for the purpose referred to in section 4 (*b*), in which provision is not made for the teaching of Public Health Laboratory work in accordance with the Schedule of Laboratory work issued by the Senatus, as provided in section 10 hereof, nor will they be recognised if such work is not taught by a specially recognised teacher.

6. Candidates shall not be admitted to the Second Examination for the said Degree until one year after taking a Degree in Medicine, nor until an interval of at least three months has elapsed after passing the First Examination.

7. Every Certificate of Laboratory attendance must bear that the Candidate worked during his period of attendance for at least fifteen hours per week.

8. Every Candidate who desires to proceed to the second examination for the said Degree must produce evidence—(*a*) that he has attended in this University at least two courses of instruction on subjects included in the Examinations set forth in section 10 hereof; (*b*) that he has attended a course of lectures in which instruction is given in Public Health; and (*c*) that after having obtained a Registrable Qualification in Medicine, he has practically studied the duties of Out-door Sanitary work under the Medical Officer of Health of a county or of a large urban district for a period of not less than six months.[1]

9. The subjects of the Examinations for the Degree of Bachelor of Science in the Department of Public Health shall be as follows:—

(*a*) For the First Examination:—1. Laboratory work. The Examination in this department is conducted practically, and by a Written Examination in which the Candidate shall be required to explain the rationale of the investigations contained in the schedule of Laboratory work referred to below. There is also an Oral Examination. 2. Elements of Experimental Physics. The Examination in this Department is conducted by means of written papers, followed by an Oral Examination.

(*b*) For the Second Examination:—1. Medicine in its application to Public Health. 2. Practical Sanitation. 3. Sanitary Law and Vital Statistics. 4. Mensuration and Drawing.

The Examinations in these departments are conducted by means of written papers, and also as far as possible practically; and an Oral Examination in each department is held after the Written Examinations.

10. Detailed Schedules of the subjects of Examination in each department named in section 10 will be issued from time to time by authority of the Senatus.

Schedule of Subjects of Examination.

The Schedules of the Subjects of Examination are the same as under the New Regulations, except that Geology is not included under the Old Regulations.

Doctorate of Science. (*See page* 426).

[1] See footnote, page 422.

IV.—AGRICULTURE.

H.—Regulations for Graduation in Science in Agriculture, applicable to all who commenced attendance on Science Classes before 1st October 1893.

1. In the Department of Agriculture the Degree of Bachelor of Science is the only Degree conferred.

2. The Rules as to the Preliminary Examination on subjects of General Education are the same as those for Graduation in the Department of Engineering. See page 439.

3. The Rules as to attendance on qualifying Classes for three Sessions are the same as those for Graduation in the Department of Engineering, see page 439; provided always (1) that instead of one of such three years of attendance, a year may be spent on a Farm or Farms in pursuance of the practical study of Agriculture; (2) that in the case of any subject in the Department of Agriculture, which is not taught in the University, attendance may be given at an Institution specially recognised by the University Court for purposes connected with Graduation in Science in that Department only.[1]

4. Each Candidate must produce a Certificate of attendance upon a Qualifying Class on each subject of Examination; and should he, instead of one of the three years of attendance on Classes required in Section 3, have spent a year in the practical study of Agriculture, he must produce a Certificate to that effect.

5. There are two Examinations for the Degree of Bachelor of Science in the Department of Agriculture. These Examinations are Written, Oral, and Practical.

6. The first Examination is in :—[2]

(1.) Agriculture, to such an extent as may from time to time be fixed by the Senatus.

(2.) Chemistry, to the extent required for the First Examination for the Degree in Pure Science.

(3.) Biology:—(*a*) Botany, or (*b*) Natural History, either subject, at the option of each Candidate.

In either case the Examination shall be to the extent required for the First Examination in these subjects for the Degree in Pure Science.

(4.) Geology, in so far as bearing on Agricultural Science.

(5.) Economic Science, to such extent as may from time to time be fixed by the Senatus.

7. Candidates who have passed the First Examination may present themselves at the end of six months for the Second Examination.

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[1] See page 405, and footnote, page 404.

[2] This Examination may be taken at one period or in two divisions at separate periods.

8. The Second Examination is in :—[1]
   (1.) AGRICULTURE and RURAL ECONOMY.
   (2.) CHEMISTRY, as applied to Agriculture.
   (3.) VETERINARY HYGIENE, to such extent as may from time to time be fixed by the Senatus.
   (4.) ENGINEERING, to such extent as may from time to time be fixed by the Senatus.

9. Candidates who have passed the Second Examination will be recommended to the Senatus for the Degree of Bachelor of Science.

10. The Examinations are conducted by University Examiners appointed by the University Court, and an additional Examiner in Agriculture, to be appointed by the University Court.

OUTLINE OF SUBJECTS OF EXAMINATIONS.

FIRST BACHELOR OF SCIENCE EXAMINATION.

1. AGRICULTURE AND RURAL ECONOMY : ITS SCIENTIFIC PRACTICE.

The subjects of Examination are those embraced in the first fifteen paragraphs of the Outline of Subjects for the Final Examination under the New Regulations.

2. CHEMISTRY.
3. BOTANY.
4. NATURAL HISTORY.
5. GEOLOGY AS BEARING ON AGRICULTURE.
6. ECONOMIC SCIENCE AS APPLIED TO AGRICULTURE.

The Examinations in Chemistry, Botany, and Natural History are the same as for the First B.Sc. in Pure Science.

The Examinations in Geology and in Economic Science are the same as for the Final B.Sc. under the New Regulations.

SECOND BACHELOR OF SCIENCE EXAMINATION.

1. AGRICULTURE AND RURAL ECONOMY.
2. AGRICULTURAL CHEMISTRY.
3. VETERINARY HYGIENE.

The Examinations in Agriculture and Rural Economy, Agricultural Chemistry, and Veterinary Hygiene, are the same as under the New Regulations.

[1] This Examination may be taken at one period or in two divisions at separate periods.

4. Engineering.

1. *Engineering Field Work.*—Surveying, with special reference to Estate and Parish Surveying, Levelling, Plotting of Surveys and Sections, Calculation of Quantities.

The Examination is otherwise the same as under the New Regulations.

FEES UNDER THE NEW REGULATIONS.

1. Preliminary Examination.

The Fee for the Preliminary Examination is 10s. 6d. for each appearance.

2. Fees for Degrees or for Registering Equivalents.

(1) *Pure Science and Engineering*—			
First B.Sc. Examination, (or for each subject, £1, 1s.)	£3	3	0
Second B.Sc. Examination,	3	3	0
Doctor of Science,	10	10	0
	£16	16	0
(2) *Public Health*—			
First B.Sc. Examination,	£3	3	0
Second B.Sc. Examination,	3	3	0
For the Degree of Doctor,	10	10	0
	£16	16	0
(3) *Agriculture*—			
First B.Sc. Examination, (or for each subject, £1, 1s.)	£3	3	0
Second B.Sc. Examination,	3	3	0
	£6	6	0

Candidates for the Degree of B.Sc. who fail to pass in one or more subjects pay a fee of 10s. 6d. for re-examination in each subject, and Candidates for D.Sc. pay a fee of £3, 3s. for each re-appearance for examination.

FEES UNDER THE OLD REGULATIONS.

(1) *Physical and Natural Science and Engineering*—			
For the Preliminary Examination, or for Registration of any exempting Qualification,	£1	1	0
For the First Bachelor of Science Examination,	2	2	0
For the Second Bachelor of Science Examination,	2	2	0
For the Doctor of Science Examination,	5	5	0
	£10	10	0

(2) *Public Health*—			
For the First Examination for the Degree of Bachelor,	£5	5	0
For the Second do. do.,	5	5	0
For the Degree of Doctor,	5	5	0
	£15	15	0
(3) *Agriculture*—			
For the Preliminary Examination, or for Registration of any exempting Qualification,	£1	1	0
For the First Bachelor of Science Examination,	2	2	0
For the Second do. do.,	2	2	0
	£5	5	0

In the event of a Candidate not passing, the Fee is not returned, but he may appear at *one* subsequent Examination without paying an extra Fee, and at any future Examination on paying one-half of the Fee.

Every Candidate for Graduation is required to pay the Fee of £1 for Registration as a Member of the General Council of the University, at least one clear day before the date of Graduation.[1]

All communications relating to the Curriculum and Examinations for Degrees in Science, and to Examinations for Science Fellowships and Scholarships, &c., should be addressed to *The Dean of the Faculty of Science*, University, Edinburgh.

All Examination, Matriculation, and Registration Fees are payable at the *Matriculation Office*, University. When Candidates cannot attend personally to pay the Fees, they should transmit them to T. GILBERT, by *Post Office*, or *Postal Orders*, or by *Bank Drafts*, crossed "Union Bank of Scotland (Hunter Square Branch), Edinburgh," and not by cheques on private accounts.

DATES OF EXAMINATIONS, FOR PRESENTING CERTIFICATES, AND PAYMENT OF FEES.[2]

1895.		PRELIMINARY EXAMINATION.[2]
Sept. 20.	Fri.	Names to be given in, and Fees paid, *on or before* this date.
,, 27.	Fri.	Italian, 2-5.
,, 28.	Sat.	English, 9-11, 12-2; Lower Greek, 3-6; Greek, 3-5.[3]

[1] Candidates should apply for their Diplomas at the Matriculation Office, immediately after obtaining the Degree. There is no additional charge for the Diploma. Any Graduate who cannot apply personally for his Diploma, is required to give written authority to some person to receive and give a receipt for it.

[2] When names are not entered, nor fees paid, on or before the stated dates, a late-entry fee of ten shillings must be paid before the Candidate can be admitted to examination. A Candidate is not held to have entered for the examination until his name is entered, all the necessary certificates, &c., lodged, and the fee paid.

[3] For Students completing the Examination under the Old Regulations.

1895.		
Sept. 30.	Mon.	Lower Latin, 9-12; Lower Mathematics, 2-5.[1]
Oct. 1.	Tu.	Higher Latin, 9-11, 12-2; French, 1st paper, 3-4.30; French, 3-5.[1]
,, 2.	Wed.	Higher Greek, 9-11, 12-2; German, 1st paper, 3-4.30; German, 3-5.[1]
,, 3.	Thur.	Higher Mathematics, 9-11, 12-1.30; French, 2nd paper, 3-5.
,, 4.	Fri.	German, 2nd paper, 9-11; Dynamics, 1-4; Moral Philosophy, 9-11;[1] Mechanics, 1-4.[1]
,, 5.	Sat.	Natural Philosophy, 9-11;[1] Logic, 2-4.[1]
1896.		
Mar. 18.	Wed.	Names to be given in, and Fees paid, *on or before* this date.
,, 27.	Fri.	Italian, 2-5.
,, 28.	Sat.	English, 9-11, 12-2; Lower Greek, 3-6; Greek, 3-5.[1]
,, 30.	Mon.	Lower Latin, 9-12; Lower Mathematics, 2-5.[1]
,, 31.	Tu.	Higher Latin, 9-11, 12-2; French, 1st paper, 3-4.30; French, 3-5.[1]
April 1.	Wed.	Higher Greek, 9-11, 12-2; German, 1st paper, 3-4.30; German, 3-5.[1]
,, 2.	Thur.	Higher Mathematics, 9-11, 12-1.30; French, 2nd paper, 3-5.
,, 3.	Fri.	German, 2nd paper, 9-11; Dynamics, 1-4; Moral Philosophy, 9-11;[1] Mechanics, 1-4.[1]
,, 4.	Sat.	Natural Philosophy, 9-11;[1] Logic, 2-4.[1]
		First Science Examination.[2]
1895.		
Oct. 2.	Wed.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 10.	Thur.	Mathematics, 9-11, 11.30-1.30; Natural Philosophy, 2.30-4.30.
,, 11.	Fri.	Natural Philosophy, 9-11.
,, 12.	Sat.	Agriculture, 9-12;[1] Economics, 1-3.[1]
1896.		
Mar. 16.	Mon.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 21.	Sat.	Practical Chemistry (and following days if necessary, at hours to be announced).
,, 23.	Mon.	Chemistry, 10-12; Botany, 1-3; Laboratory Work (Public Health), 10-12; Physics (Public Health), 1-3.
,, 24.	Tu.	Zoology, 10-12; Geology (Public Health), 1-3; Geology (Agriculture), 1-3.[1]

[1] For Students completing the Examination under the Old Regulations.
[2] See footnote 2, page 447.

1896.		
Mar. 25.	Wed.	Oral Examinations begin. Practical Work in Public Health Laboratory begins.
April 1.	Wed.	Economics (Agriculture), 11.30-1.30[1]; Mathematics, 3-5.
,, 2.	Thur.	Mathematics, 9-11; Drawing (Geometrical), 9-12.
,, 3.	Fri.	Natural Philosophy, 9-11, 11.30-1.30.
July 10.	Fri.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 18.	Sat.	Practical Chemistry (and following days if necessary, at hours to be announced).
,, 20.	Mon.	Chemistry, 10-12; Botany, 1-3. Laboratory Work (Public Health), 10-12; Physics (Public Health), 1-3.
,, 21.	Tu.	Zoology, 10-12; Geology (Public Health), 1-3; Geology (Agriculture), 1-3.[1]
,, 22.	Wed.	Oral Examinations begin. Practical Work in Public Health Laboratory begins.

FINAL SCIENCE EXAMINATION.[2]

1895.		
Oct. 2.	Wed.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 11.	Fri.	Zoology, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged. Astronomy, 9-12 (1st paper), 1-3 (2nd paper).
1896.		
Mar. 16.	Mon.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 23.	Mon.	Botany, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged; Veterinary Hygiene, 1-3. Medicine (Public Health), 10-12; Sanitary Law and Vital Statistics, 1-3.
,, 24.	Tu.	Sanitation, 10-12; Geology (Agriculture), 1-3.
,, 25.	Wed.	Agriculture, 9-12; Agricultural Chemistry, 1-3; Practical Examination in Agricultural Chemistry, at time to be arranged. Oral and Practical Examinations in Public Health subjects begin.
,, 30.	Mon.	Mathematics, 9-12, 2-5; Engineering, 9-11, 3-5.
,, 31.	Tu.	Mathematics, 9-12; Natural Philosophy, 2-5; Engineering, 9-12; Engineering Field Work (Agriculture), 3-5; Dynamics (Engineering), 2-5.

[1] For Students completing the Examination under the Old Regulations.
[2] See footnote 2, page 447.

1896.

April 1.	Wed.	Natural Philosophy, 9-12, 2-5; Experimental Physics, 9-12; Engineering, 9-11; Engineering (Agriculture), 9-11; Economic Science, 11.30-1-30; Experimental Physics (Agriculture), 3-5.
,, 2.	Thur.	Agricultural Entomology, 9-11; Forestry, 11.30-1-30; Drawing (Engineering), 9-12, 2-5.
July 10.	Fri.	Names to be given in, Certificates shown, and Fees paid, *on or before* this date.
,, 15.	Wed.	Physiology, 10-1 (1st paper), 2-4 (2nd paper); Practical Examination at time to be arranged.
,, 20.	Mon.	Chemistry, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.
,, 21.	Tu.	Geology, 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.
,, 22.	Wed.	Human Anatomy (including Anthropology), 9-12 (1st paper), 1-3 (2nd paper); Practical Examination at time to be arranged.

Doctor of Science.[1]

D.Sc. Candidates are required to lodge their Theses and proof of their eligibility with the *Dean of the Faculty of Science* at the Matriculation Office, and to pay the Fees on or before 30th April of the year in which they propose to graduate.

Class Prize and Honours Lists.

SUMMER SESSION, 1894.

STRUCTURAL AND FIELD GEOLOGY.

1. Jas. A. Murray (*Medallist*); 2. T. J. Jehu and I. R. Roberts—equal; 4. James Taylor; 5. M. R. Byles, Wm. Mair, and Jas. Miller—equal; 8. T. C. Fraser; 9. Alex. Fraser Innes.

JAMES GEIKIE, LL.D., D.C.L., *Professor.*

ENGINEERING FIELD WORK.

1. J. Keith Ross (*Medallist*); 2. W. D. Elder and R. Paterson—equal; 4. W. D. M. Falconer and Sidney Unwin—equal; 6. J. Purser.

G. T. ARMSTRONG, C.E., M.A., F.R.S.E., *Professor.*

[1] See footnote 2, page 447.

WINTER SESSION, 1894-95.

APPLIED MATHEMATICS.

Advanced Science.

First-Class Honours.—1. J. Keith Ross, M.A. (*Prize*).
Second-Class Honours.—2. James Hay; 3. H. de Boissiere.

C. G. KNOTT, D.Sc., *Lecturer.*

ASTRONOMY.

Prize and First-Class Certificate.—Miss J. Chrystal Macmillan.
First-Class Certificate.—John F. Cameron.

RALPH COPELAND, Ph.D., *Professor.*

GEOLOGY AND MINERALOGY.

Honours Certificates.—1. T. J. Jehu, Wales, and J. A. Murray, Mid-Lothian (*Medallists*)—equal; 3. J. Miller, Edinburgh; 4. A. Fraser, Elgin, and J. Smart, Edinburgh—equal; 6. J. M. Macalister, Fife; G. Taylor, Aberdeen; and F. P. Walker, Staffordshire—equal; 9. W. Blackadder, Broughty-Ferry; 10. J. W. Falconer, Forfarshire; 11. A. H. Pirie, Dundee; 12. G. W. Park, Hants; 13. W. D. M. Falconer, Blairgowrie; 14. W. J. Haig, Clackmannan, and L. Smith, Leeds—equal; 16. R. Bowie, Edinburgh, and G. A. Rorie, Dundee—equal; 18. G. P. Yule, Edinburgh; 19. W. P. Meldrum, Mauritius; 20. C. A. Carlow, Fife; 21. J. S. Low, Yorkshire.

Practical Class.

Honours Certificates.—1. J. A. Murray, Midlothian, and L. Smith, Leeds (*Medallists*)—equal; 3. A. H. Pirie, Dundee; 4. J. Miller, Edinburgh; 5. G. A. Rorie, Dundee; 6. J. W. Matthewson, Fife; 7. J. S. Low, Yorkshire.

JAMES GEIKIE, D.C.L., LL.D., *Professor.*

ENGINEERING.

1. J. K. Ross, M.A. (*Medal and First Prize*); 2. James Hay (*Second Prize*); R. A. Gray (*Third Prize*); 4. John Inglis; 5. Hector de Boissiere; 6. W. J. Dilley; 7. R. A. McConaghy; 8. R. Paterson.

G. F. ARMSTRONG, M.A., M.Inst.C.E. *Professor.*

Geometrical and Engineering Drawing.

1. T. C. Fraser (*Medal*); 2. James Hay (*Prize*); 3. J. K. Ross, M.A.; 4. W. J. Dilley; 5. R. A. McConaghy; 6. R. Paterson; 7. R. A. Gray; 8. Hector de Boissiere; 9. John Inglis.

W. HUME KERR, M.A., B.Sc., *Lecturer.*

AGRICULTURAL AND RURAL ECONOMY.

1. John Leslie; 2. Arthur Allsebrook (*Medallists*); 3. Robert Affleck; 4. Frank P. Walker; 5. W. Lee, and Samuel Milligan—equal; 7. Philip A. Salomons, and G. Malthouse—equal; 9. T. S. Richmond, and H. W. Stone—equal; 11. Alex. Fraser; 12. Duncan Anderson; 13. William Bruce; 15. Hugh Welsh; 16. Robert B. A. Wallace, and J. A. Macgregor—equal. Report on Farm Excursions—A. Allsebrook (*Medallist*).

STEVEN SCHOLARSHIP, about £80, divided between John Leslie and Frank P. Walker, who were equal.

HIGHLAND SOCIETY PRIZES, in books, value £10.—Arthur Allsebrook, £6; Samuel Milligan, £4.

ROBERT WALLACE, *Professor.*

AGRICULTURAL CHEMISTRY.

FIRST-CLASS HONOURS.—Frank Walker (*Medal*); John Leslie.

SECOND-CLASS HONOURS.—Philip A. Salomons, Arthur Allsebrook.

A. P. AITKEN, D.Sc., *Lecturer.*

AGRICULTURAL ENTOMOLOGY.

1. Frank P. Walker (*Medallist*); 2. John Leslie; 3. Alexander Fraser; 4. Philip A. Salomons; 5. Samuel Milligan; 6. William A. Lee; 7. J. Raymond Smuts; 8. Charles Burness.

W. FREAM, LL.D., B.Sc., *Lecturer.*

FORESTRY.

FIRST CLASS CERTIFICATE.—Charles Edward Legat (*Medal and Prize of £2*); Frank P. Walker (*Prize of £1*); Alexander Fraser.

SECOND-CLASS CERTIFICATE.—Hugh William Stone, and Thomas S. Richmond.

FRED. BAILEY, Lt.-Col., *Lecturer.*

Examination Papers for Degrees in Science.

PRELIMINARY EXAMINATION.

[*For Papers in the Preliminary Subjects, see pages* 176-209.

FIRST SCIENCE EXAMINATION.

Pure Science.

[*For Papers in Mathematics and Natural Philosophy, see Papers in these Subjects for the Degree of M.A. ; and for Papers in Chemistry, Botany, and Zoology, see Papers for First Professional Examination for Degrees in Medicine.*]

Public Health.

LABORATORY WORK.

March 1895.—*Two hours.*

1. How is the amount of organic matter in a potable water determined?

2. Describe the process for estimating the amount of alcohol in beer.

3. Describe in detail a method for estimating the albumenoids and sugar in milk.

PRACTICAL WORK.

The following are examples of what have been given at the Examinations:—

(*This part of the Examination lasts four days.*)

1. Quantitative determination of—
   (1) Carbonic Acid, and
   (2) Ammonia in the Atmosphere.

2. Bacteriological examination of Soil, and making culture media.

3. Analysis of, and report on, a sample of potable water.

Each Candidate must recognise Bacteriological Cultures by means of Cultivation, Staining, and Microscopical Examination.

PHYSICS.

Monday, 25th March 1895.—1 *to* 3 *o'clock.*

1. State the successive steps necessary to the establishment of the law of gravitation made by Kepler and Newton respectively, distinguishing those steps which are kinematical from those which are dynamical.

2. Define the terms stress and strain. Explain the nature of the stress and strain involved in the measure (*a*) of the compressibility, (*b*) of the rigidity of any substance.

3. Trace the course of the rays from the object to the eye, when the object is seen after reflection at each of two plane mirrors inclined at an angle of 45°.

4. What is the physical distinction among rays of different colours? Account for the colours (*a*) in a rainbow, (*b*) in a soap bubble.

5. In what proportions must steam at 100° C. be mixed with ice at 0° C. to produce water at 45 C., supposing ten per cent. of the heat is lost by radiation before the process of mixing is complete?
(The latent heat of fusion of ice is 80, and of evaporation of water is 537.)

6. What is the nature of sound, and how is it propagated? What are the special characteristics of a musical note, and upon what do they respectively depend?

7. State Boyle's law, and explain graphically, or otherwise, how it is modified in the case of a gas and of a vapour, each within a few degrees of its critical temperature. What is the corresponding law for a saturated vapour?

8. State the function of an induction electric machine. How can we calculate the utmost charge it can give to a conductor, and the energy of the charge?

9. State Ohm's law, and define the quantities involved.
The total current in a circuit is 10 amperes. If two points in the circuit be joined in multiple arc by wires of 1, 2, 3 ohms resistance, find the current in each of the wires.

GEOLOGY.

Tuesday, 26th March 1895.—1 *to* 3 *o'clock.*

1. Describe the mechanical and chemical action of *Rain* as a geological agent.

2. Distinguish between *Subsoil* and *Soil*, and give an account of their origin.

3. What is a *Dyke?* How may it affect the passage of underground water?

4. Give some account of *Natural Springs*. What are the chief kinds of mineral matter found in solution?

5. What kind of geological structure renders a water-supply by *Artesian Wells* possible?

6. Give the mineralogical characters of *Augite*, *Olivine*, *Calcite*, *Serpentine*, *Gypsum*, *Orthoclase*, and *Hæmatite*.

7. Give the petrographical characters of *Basalt*, *Porphyrite*, *Gneiss*, *Chlorite-schist*, *Quartzite*, *Dolomite*, *Chalk*, *Greywacké*, and *Marble*.

8. Draw a section or sections to illustrate the following structures:—*Anticline*, *syncline*, *unconformity*, *fault*, *dyke*.

Agriculture.

AGRICULTURE.

Saturday, 13*th October* 1894.—9 *to* 12 *o'clock*.

1. Where nitrate of soda and sulphate of ammonia have been applied annually throughout a series of years to different plots of permanent grass-land at Rothamsted, shew the relative effects of these manures as regards (*a*) the quantity of the produce and (*b*) the quality, character, or botanical composition of the herbage.

2. When old grass-land or natural hill pasture is limed and put through a course of cropping, explain fully what happens to the original stock of humus present in the soil.

3. Discuss the relative advantages and disadvantages of day-work and piece-work when applied to some of the more important operations of the farm. State the average contract prices during the current season for sheep-shearing, thinning turnips, shearing barley by hook, cutting beans, and lifting turnips.

4. Describe fully the system of farming generally adopted on arable farms (not dairy) in the neighbourhood of Edinburgh.

5. Indicate the identifying features of the seeds of the following plants:—*Anthoxanthum odoratum*, *Festuca pratensis*, *Lolium perenne*, *Lolium Italicum*, *Poa pratensis*, and *Poa trivialis*.

6. Draft suitable specifications for the construction of a post and wire fence (*a*) on a sheep hill-farm, and (*b*) through a bullock pasture. Give a detailed estimate of the probable cost per hundred yards in both cases.

7. Sketch a rotation suitable for a potato-growing farm, say in the neighbourhood of Dunbar. State fully the considerations that would influence you in your selection.

8. Sketch the life-history of the Cockchafer (*Melolontha vulgaris*), and indicate remedial or preventive measures in the case of threatened or actual attack. How would you distinguish a cockchafer grub from a surface caterpillar?

Wednesday, 27th March 1895.—9 *to* 12 *o'clock.*

1. Give a short account of the chief physical properties of soils where sand, clay, and humus respectively predominate.

2. Assuming that you had no previous acquaintance with a farm, and could receive no reliable advice as to its capabilities, how would you proceed to place an independent valuation upon it, with the view of leasing it?

3. Describe the construction of the various kinds of harrows, rollers, and cultivators. What are their weight, dimensions, and price, and what area can they treat efficiently in a day?

4. Give an account of the system of management pursued on farms in the neighbourhood of Edinburgh, where practically no live stock, beyond the work horses, is kept. Construct a calendar shewing what operations take place on such a farm during the various months of the year.

5. Describe in detail the cultivation of the potato crop, and sketch the life-history of the most important disease from which it suffers.

6. Give identifying features, life-history, and preventive and remedial measures in the case of *two* of the following insects:—Rose Chafer, Antler Moth, Gout Fly, Cock Chafer.

7. Calculate the percentage of Nitrogen (soluble and insoluble), Phosphoric Acid (soluble and insoluble), and Potash in a compound manure containing the following commercial substances:—

3 cwt. Superphosphate of Lime.
1 cwt. Basic Slag.
3 cwt. Kainit.
½ cwt. Nitrate of Soda.
¼ cwt. Sulphate of Ammonia.
½ cwt. Fish Meal.
¾ cwt. Dissolved Bones.

8. Give an account of the best manner of storing, treating and utilising liquid manure.

CHEMISTRY.
BOTANY.
NATURAL HISTORY.

The Examinination Papers in Chemistry, Botany, and Natural History are the same as for Pure Science.

GEOLOGY.

Tuesday, 24th July 1894.—1 *to* 2 *o'clock.*

1. Give the chemical composition of Felspur, Augite, Limonite, Calcite, Quartz, Serpentine.

2. Give some account of the chemical action of rain on Granite, Mica-schist, Limestone, and Basalt.
3. Describe three examples of Chemically-formed, Organically-derived, and Mechanically-formed rocks respectively.
4. What is an Artesian Well?
5. Define the terms *Soil* and *Subsoil*.
6. Draw *one* section to illustrate the following structures:—Unconformity, Overlap, Fault, Outlier, Dyke.
7. Describe the mode of occurrence of Rock-salt, Phosphatic Nodules, and Apatite.

Tuesday, 26th March 1895.—1 *to* 3 *o'clock.*

1. Give the chemical composition of six common rock-forming minerals.
2. What is the origin of *hardpan?* Mention the conditions under which it is found.
3. How do the following rocks decompose under the action of the weather:—Granite, Basalt, Limestone, Sandstone, Argillaceous Shale? What is the character of the subsoil produced in each case?
4. Draw a section to illustrate the following structures:—Escarpment, anticline, syncline, dyke, fault, unconformity.
5. Describe Boulder-clay. What is the character of the soil that overlies it?
6. What is the origin of Peat. Under what conditions does it increase?
7. What is the origin of alluvial terraces and deltas?

ECONOMICS.

Saturday, 13th October 1894.—1 *to* 3 *o'clock.*

1. Compare, from the point of view of production, the advantages and disadvantages of large and small holdings (*a*) as a system of ownership, and (*b*) as a system of cultivation (assuming physical and other conditions to be suitable for either class of holdings).
2. How do you account for the differences in the rates of wages of agricultural labourers which exist between various parts of the United Kingdom?
3. Discuss the possible effects of agricultural improvements upon rent.
4. What are the leading elements you would take into account on offering for a farm under a long lease?
5. Discuss the respective interests of landlord and tenant with reference to compensation for improvements, and state generally how these have been reconciled in the Agricultural Holdings (Scotland) Act.
6. How far does cost of production determine the value of mutton

and wool respectively? Why has the price of butcher meat in this country greatly increased relatively (*a*) to corn and (*b*) to wool?

7. What has led to the appreciation of gold, and how does it specially affect agriculture?

ECONOMICS.

Wednesday, 3rd April 1895.—11.30 *to* 1.30 *o'clock.*

1. In what respects would a simple system of land transfer be likely to affect agriculture in this country?

2. Discuss the different amendments which have been proposed to the Agricultural Holdings Act.

3. "Rent depends on Prices, not Prices on Rent." Analyse and explain this statement, and mention any cases where its converse is true.

4. What are the main points for consideration in ascertaining "fair rents"? Can you account for the distaste for Land Courts in England and Scotland?

5. Examine carefully how far the interests of the British farmer are affected by changes in the relative values of the precious metals.

6. How do you account for the steady rise in the wages of agricultural labour within recent years notwithstanding the fall in rent and farmers' profits?

7. What are the chief elements favourable to the success of a system of small holdings for cultivation?

FINAL SCIENCE EXAMINATION.

Pure Science.

MATHEMATICS.

NATURAL PHILOSOPHY.

The papers in Mathematics and Natural Philosophy are the same as for the Degree of M.A. with Honours in Mathematics and Natural Philosophy.

EXPERIMENTAL PHYSICS.

Thursday, 11th October 1894.—2.30 *to* 4.30 *o'clock.*

(*Six only of the following questions to be answered, but with full detail.*)

Describe one experimental mode of ascertaining—

1. The Mean Density of the Earth.

2. The Coefficient of Atmospheric Resistance to a spherical projectile, whose speed is less than that of Sound.

3. The Speed of Sound in Water.

4. The mean Refractive Index of Metallic Silver.

5. The Value of g at any station.
6. The Length of Electro-magnetic Waves from any given source.
7. The Specific Gravity of a soluble substance in fine powder.
8. The contraction when Alcohol and Water are mixed in different proportions.
9. The Viscosity of a Liquid.
10. The Density of a Super-heated Vapour.

Wednesday, 3rd April 1895.—9 *to* 12 *o'clock.*

(*Six questions, at most, to be answered.*)

1. Describe fully one method of measuring the speed of light, which does not require a knowledge of the sun's parallax.
2. State the precautions which must be taken in adjusting and using a tangent galvanometer.
3. What do we learn from accurate measurements of the temperature of a gas before, and after, passing steadily through a plug of cotton-wool; and how are they obtained?
4. Describe, and explain the principle of, some one method of measuring high temperatures.
5. How can we ascertain the effect of pressure upon the maximum density point of water?
6. Describe a method of comparing the capacities of two Leyden jars.
7. How is the specific heat of air, at constant volume, accurately determined?
8. State the more important precautions required in any one mode of determining the mean density of the earth.
9. Describe an accurate mode of measuring the specific inductive capacity of a solid.
10. Explain one method of verifying the existence of the "Thomson effect" in iron.

CHEMISTRY.

FIRST PAPER.

Monday, 23rd July 1894.—10 *to* 12 *o'clock.*

1. What impurities are usually present in commercial caustic potash? How would you test for each of them?
2. What impurities may be contained in commercial iodine? How would you prepare pure iodine from commercial iodine?
3. Give an account of one of the following sets of salts:—Borates, Arsenites, Periodates, Platinocyanides.
4. What is understood by Osmotic Pressure? Describe and explain any one of the ways for determining its amount in a particular case.

SECOND PAPER.

Monday, 23rd July 1894.—1 *to* 3 *o'clock.*

5. State what you know of thio-carbonates, including the ethereal salts.

6. Select one example of a Ketone-acid, and give its method of preparation, physical properties, and characteristic reactions.
7. Discuss the constitution of isatin.
8. How do you test for nitrogen in an organic substance?

FIRST PAPER.

Wednesday, 27th March 1895.—9 *to* 12 *o'clock.*

1. Compare Iron, Chromium, and Manganese in respect of the salts in which the metal forms the positive ion, and also in respect of the salts in which the metal forms part of the negative ion (salt radical).
2. State what you know of the Chemistry of Glass, giving the qualitative composition of the more important kinds.
3. How is Lactic Acid prepared? How has its constitution been ascertained? How does Sarco-lactic Acid differ from Lactic Acid of fermentation?
4. A compound of Carbon, Hydrogen, and Oxygen contains 50.00 per cent. Carbon and 5.56 per cent. Hydrogen. Calculate the simplest formula for it.

SECOND PAPER.

Wednesday, 27th March 1895.—1 *to* 3 *o'clock.*

1. How can the molecular weight of a non-volatile substance such as sugar be ascertained?
Explain the apparent anomalies in the case of Electrolytes.
2. Give a classification of Basic Salts with examples.
3. Give the constitution of each of the following with the evidence in each case :—Indol, Pyridine, Quinoline, Acetonitrile, Cumarin, Neurine, Choline.

HUMAN ANATOMY, INCLUDING ANTHROPOLOGY.

FIRST PAPER.

Saturday, 30th March 1895.—9 *to* 12 *o'clock.*

1. Describe the course and arrangement of the blood-vessels which convey the blood from the right to the left side of the Heart. Explain the developmental changes by which the division of the heart into four chambers takes place.
2. Describe the position, arrangement, and structure of the Corpus Callosum. Explain its formation in the development of the Brain.
3. Write a comparative description of an amphi-arthrodial and a diarthrodial joint. Explain the difference in their movements.
4. Enumerate the muscles which act in raising the arm above the head. At which joints do the movements take place?
5. What is meant by an Epiphysis? Explain the process by which a long bone grows in length.

SECOND PAPER.

Saturday, 30th March 1895.—1 *to* 3 *o'clock.*

1. Describe the racial and sexual characters which can be detected in the Sacrum, and state the methods by which these can be determined.

2. What is meant by the term Prognathism? Give some of the methods which have been recommended in order to determine its amount. In what races is it best marked?

3. What is meant by premature synostosis of the cranial sutures? What influence would it exercise on the form of the cranium?

4. Explain the structure of the cuticle, and shew how it affects the colour of the skin.

PHYSIOLOGY.

Friday, 29th March 1895.—9 *to* 12 *o'clock.*

1. Compare Lymph with Blood as to (*a*) chemical composition, and (*b*) microscopical characters.

Discuss the theories advanced regarding the production of lymph and the maintenance of its flow.

2. Explain the manner in which a Rheotome is used for estimating the velocity of a nerve impulse.

3. Describe (*a*) the minute general structure of the retina of a mammal; (*b*) the relation of its structural elements to each other; and (*c*) the methods recently used in the study of these structural relations.

GEOLOGY, INCLUDING MINERALOGY AND PALÆONTOLOGY.

Tuesday, 26th March 1895.—9 *to* 12 *o'clock.*

(*Eight questions only to be attempted, including* 3, 6, *and* 8.)

1. Give some account of the geological action of *Wind* as a destructive and reproductive agent.

2. How are caverns in Limestone formed? Describe the character of the accumulations usually met with upon their floors.

3. Explain the connection between geological structure and topography, and illustrate your answer by drawing a section through any district known to you.

4. At what geological periods has volcanic action manifested itself in the area of the British Islands? Describe any British volcanic district.

5. Define the following terms:—Lamination, Foliation, Devitrification, Slickensides, Fault-breccia, Overlap, Drusy Cavity, Septarian nodule, Fan-structure.

6. Give the crystallographic and chemical characters of the following minerals:—Orthoclase, Quartz, Magnetite, Rock-salt, Calcite, Diamond, Cassiterite, Labradorite.

7. Give the petrographical characters of three schistose rocks, and three igneous crystalline rocks.

8. By what fossils would you distinguish rocks of Cambrian, Carboniferous Limestone, Old Red Sandstone, Cretaceous, Eocene, and Pleistocene age respectively?

9. Give some account of the flora of the Carboniferous Period.

10. Give the general characters and geological range of the following genera: Nautilus, Lingula, Sigillaria, Plesiosaurus, Orthoceras, Mastodon.

ZOOLOGY AND COMPARATIVE ANATOMY.

Tuesday, 24th July 1894.

1. Discuss the embryology of the various renal organs found in Vertebrates, and compare with one another the conditions of the organs and the ducts found in the adult Myxine, Dogfish, Cod, Frog, and Rabbit.

2. Compare with one another *Phoronis*, *Rhabdopleura*, *Cephalodiscus*, and *Balanoglossus*, and refer them to their relative positions in a classificatory scheme.

3. Discuss "polymorphism" and "division of labour," as seen amongst the members of a Coelenterate colony, and describe the conditions found in *Hydractinia*, *Millepora*, and the Siphonophora.

4. Discuss the origin of fresh-water Animals, and explain if possible some of the modifications they have undergone.

5. Give an account of the chief modifications undergone by the mandibular and hyoid arches and the intervening cleft in the different groups of Vertebrates. Trace the history of the muscles of expression in Man.

Thursday, 28th March 1895.—9 *to* 12 *o'clock.*

FIRST PAPER.

1. Describe the chief forms of skeletal structure met with in the Protozoa, and write a short account of the part played by these organisms in building up the crust of the earth.

2. Enumerate the chief groups of parasitic animals. What features in the structure and life-history of parasites are usually associated with their mode of life?

3. Give an account of the origin and relations of the fœtal appendages of a chick.

4. Describe the peculiarities of an insular Fauna, and discuss how far the Fauna of an oceanic island throws light on the origin of the island.

5. Mention five typical examples of the Echinoderm groups. Classify them, and give your reasons for the classification adopted.

Tuesday, 26th March 1895.—1 *to* 4 *o'clock.*

SECOND PAPER.

(*Five questions to be answered.*)

1. Write an account of the modes of development and succession of the teeth of Vertebrates, and discuss the morphology of monophyodontism, diphyodontism, homodontism, and heterodontism in Mammals.

2. Give an account of the different ways of development of the sexual organism in Nemertines *or* Echinoderms. Indicate which you regard as the primitive one, and give reasons for your opinion.

3. Describe the development of the pronephros in one of the lower Vertebrates. State the chief modifications it presents in Vertebrates, and write a short account of the probable course of evolution of the urinary organs of Vertebrates.

4. Asymmetrical Molluscs are said to be derived from bilaterally symmetrical forms. What evidence of this is afforded by Comparative Anatomy?

5. What do you understand by the continuity of the germ-plasm? How may new varieties and species have arisen amongst the Protozoa?

6. Describe the following larval forms:—A Nauplius, a Zoea, a Phyllosoma, a Tornaria. To what extent does their structure throw light on the ancestry of the groups in which they occur?

7. Discuss fully the systematic position of Balanoglossus.

BOTANY.

Monday, 25th March 1895.—9 *to* 12 *o'clock.*

FIRST PAPER.

1. Write a general account of the morphology of the flowers in Coniferæ.

2. Describe in detail the anatomical structure of a typical root in a monocotyledonous plant.

3. Briefly state the present condition of our knowledge of the movement of water in plants.

4. Describe and compare the life-histories of Anthoceros and Sphagnum, and of Pythium and Vauchuria.

5. What do you understand by geotropism? How have the geotropic characters of plants been investigated?

Monday, 25th March 1895.—1 *to* 3 *o'clock.*

SECOND PAPER.

1. Write an account of the general morphology of Floridæ.

2. Discuss the question of the relation between habit and habitat in plants.

3. Give an account of the present state of our knowledge of the phylogeny in Pteridophyta.

4. Describe the experiments upon which the current views regarding the relationship of green plants to the gases of the atmosphere are based. What grounds are there for modification of these views?

5. Write what you know about nuclear structure in plants.

PRACTICAL BOTANY.

Wednesday, 27th March 1895.—10 *to* 1 *o'clock.*

1. Specimen A. Make microscopic sections illustrating its structure, mount them, and leave them for inspection. Sketch them sufficiently to allow of your giving a list of explanatory references. To what group of plants does this belong? Give your reasons.

2 to 5 o'clock.

2. Specimens B, C. By means of the Flora provided, determine the Genus and Species.

3. Specimens D, E, F, G. Refer to their Natural Orders, giving your reasons.

4. Specimens H, I, J, K, L, M, N, O, P, Q. Identify, and briefly describe.

Specimen A. Stem of *Veronica cupressoides.* B. *Saxifraga oppositifolia.* C. *Poa annua.* D. *Nordmannia cordifolia.* E. *Eriostemon intermedius.* F. *Fentas carnea.* G. *Thunbergia alata.* H. *Phallus impudicus* fructification. I. Pseudopodium *of Sphagnum cymbifolium* J. Carpel of *Cycas ruminiana.* K. *Bryonia dioica* tendrils. L. Leaf tendrils of *Corydalis cava.* M. Fixing organs of *Bignonia unguis.* N. Budding of *Colchicum autumnale.* O. Bladders of *Utricularia vulgaris.* P. Twig of *Ruscus androgynus.* Q. Mycodomatia of *Vicia Faba.*

Engineering.

DYNAMICS.

Tuesday, 2nd April 1895.—2 *to* 5 *o'clock.*

1. Find expressions, in terms of polar and Cartesian co-ordinates, for the normal and tangential accelerations of a moving particle.

How much faster must the earth rotate so as to make the apparent weight of a body at the equator half its present value?

2. Find the acceleration, towards the pole, when the path of a point is the curve—

$$r = a(1 - \cos\theta).$$

3. Five rods of equal length are jointed together, end to end, and are then suspended so as to form a funicular pendulum, of which the middle rod is horizontal, the two end rods are inclined 45° to the horizontal, and the other two 30°. Find the relative weights of the rods, the tensions on the rods, and the stresses through the points of suspension.

4. Define the co-efficient of friction, the angle of friction, and the circle of friction (in the case of an axle).

A mass is attached by means of an elastic string to a point on a rough inclined plane, where $\mu = 0.3$. Find the limiting positions of equilibrium, the string being such as just to be doubled in length when the whole weight of the mass acts upon it.

5. A uniform chain, of given length, is fixed to a point above a rough floor, part of it resting on the floor, where $\mu = 0.5$. Find the utmost distance to which the other end can be extended so that the whole may remain at rest.

6. Find the intrinsic equation of the path of a point when the acceleration in the direction of motion is as the square of the speed, and that along the radius of curvature is directly as the speed.

7. Define moment of inertia, and enumerate some of its important properties.

A wheel and axle, whose weight is 20 lbs., and radius of gyration 2 feet, is set in motion by the descent of a mass of 5 lbs. through a distance of 50 feet. The radius of the axle is 3 inches, and 20 p.c. of the work done is lost in overcoming friction. Calculate the final angular velocity of the wheel and axle.

8. Discuss the small oscillations of a heavy body about a horizontal axis. In particular express the length of the equivalent simple pendulum in terms of the positions of the centre of suspension and the centre of oscillation. Point out the importance of this form of experiment.

9. A barrel full of water is placed on a smooth horizontal plane, and the tap is opened so that the water escapes horizontally in a plane through the axis. Find the subsequent motion.

10. Shew how the most general plane strain can be decomposed into an isotropic strain, two simple shears, and a rotation ; or, as an alternative, decompose the general plane stress into an isotropic stress and two shearing stresses.

11. Define rigidity, compressibility, and Young's modulus, and shew how each may be measured. Prove that, given any two, the third can be calculated.

12. Find expressions for the compressibility of a gas (1) at constant temperature, (2) when no heat is allowed to enter or leave.

13. Establish by general reasoning the principle that a body which contracts on melting has its melting point lowered by pressure.

14. State, generally, how far the principles of conservation of energy, of momentum, and of moment of momentum, enable us to go in the treatment of kinetic problems. Give an instance in which they are insufficient, and point out what more is required.

Monday, 1st April 1895.—9 *to* 11 *o'clock.*

1. Give a sketch of a "queen post truss" for a span of 40 feet, stating the dimensions of the chief parts. Supposing the roof to be covered with ordinary slates laid on sarking, weighing conjointly 10 lbs. per

square foot, calculate the strains upon each of the "queen posts" and the "straining beams," and say whether they are in compression or tension.

2. A heavy block of stone weighing 3 tons has to be lifted by means of a system of pulleys hung from a set of shear legs, the available power for lifting being only 900 lbs. What pulleys would you require, and what would be the least dimensions for the shear legs consistent with safety?

3. Give three methods of determining the "meridian," supposing that in two cases you possess a transit instrument, and in the remaining case that you have no optical instrument at all.

Explain the principle of the sextant, give a sketch shewing the chief parts, and state for what it is chiefly employed.

4. What is the "virtual slope" of a water pipe? In practice why must the pipe not rise higher than this line?

If a pipe 10 inches in diameter and 1000 feet in length have a head of 4 feet, what will be its discharge in gallons per minute?

5. Suppose that a line of railway has to cross a piece of very soft country, what steps would you adopt to overcome the difficulty?

What is meant by equalising earthwork?

NOTE.—*Answers should, as far as possible, be illustrated by sketches or diagrams.*

Monday, 1st April 1895.—3 *to* 5 *o'clock.*

1. State generally the chemical and physical differences between Cast Iron, Wrought Iron, and Steel. Give examples of particular structures and parts of machines for which each of the above are especially adapted. What are the Breaking Weights of Cast and Wrought Iron and of Steel? What factors of safety would you use in case of dead loads for them?

2. Give the various steps in the process of Brick manufacture, and point out the characteristics of good bricks. What are the two principal "bonds" used in brick work? Give sketches illustrative of each. State four of the chief points to be attended to in brick building.

3. Sketch a section of a canal in clay soil, capable of taking through large barge boats 12 feet beam by 4½ feet deep. Supposing the canal to be partly cutting and partly embanking, how should the embankments be formed and made water tight?

4. Give the three laws of fluid friction, and shew how to express them as a simple equation. Explain within what limits the above laws hold good.

A large vessel whose immersed surface is 19,000 sq. ft. has an engine-power of 12,000 I.H.P. What percentage of this is used in overcoming skin friction when going at 18 miles per hour?

5. Name some of the chief characteristics of good timber generally.

Give the names of five trees belonging to the coniferous order, and five of hard wood.

What means are adopted for seasoning timber naturally and artificially? How is timber most effectively preserved from the weather?

NOTE.—*Answers should, as far as possible, be illustrated by sketches or diagrams.*

Tuesday, 2nd April 1895.—9 *to* 11 *o'clock.*

1. In what respects do the Y. and the Dumpy Levels differ as regards construction?

Is the exact coincidence of the cross-wires with the line of collimation essential to accurate levelling? Give reasons for your answer.

2. What are the "Co-efficients of Velocity" and "of Contraction" as used in hydraulics, and what is their product called. In what investigations is it employed?

Two reservoirs, the water in which is at different levels, are connected by a 12 in. main. What effect would the substitution of two 9 in. pipes for this have upon the quantity of water passing?

3. What is the object of jacketing the cylinder of a steam engine?

The diameter of a steam engine piston is 40 in., and the stroke is 5 ft. With an initial cylinder pressure of 80 lbs. per sq. in., cut off at one-third, and the engine running at 50 revolutions per minute, what horse-power will be developed? (Hyp. log. 3 = 1.0986.)

4. Deduce an expression for the resistance to torsion of a given cylindrical shaft.

A W.I. shaft, in which the shearing stress must not exceed 8000 lbs. per sq. in., is 3 in. in diameter, and is to make 150 revolutions per minute. What is the greatest horse-power that can be transmitted?

5. What is "Camber"? to what applied? and how given?

A beam, carried on supports at either end, is uniformly loaded. Supposing the deflection is to be restricted to 1 in. in every 50 ft. of span, and the stress in the material to 400 lbs. per sq. in., determine the ratio of span to depth, on the assumption that the neutral surface is at half the depth of the beam. (E = 1,200,000.)

NOTE.—*Answers should, as far as possible, be illustrated by sketches or diagrams.*

Wednesday, 3rd April 1895.—9 *to* 11 *o'clock.*

1. Using the methods of a "changed brearing," shew, by means of an example, how the lengths of two sides, omitted from a needle-survey, may be supplied.

2. How are dynamometers classified, and what are the particular advantages of each type?

A rope-dynamometer is used to ascertain the horse power which is being developed by an engine, the fly-wheel of which is 5 ft. in diameter.

One end of the rope is fastened to a spring balance, which indicates 180 lbs., while, from the other, a weight of 300 lbs. hangs; and the engine is making 150 revolutions per minute. What horse-power is the engine developing?

3. What is meant by "reciprocal figures"?

By a graphic method, determine the stress in each member of the roof-truss, outline diagram of which, with general data as to loads, &c., is given on the accompanying sheet.

4. Sketch, and explain the special advantages of, Joy's valve-gear. Construct a diagram to exhibit its motion.

5. Make a sectional sketch through the cylinders of a compound steam engine.

What relationship exists between the amount of work done per stroke, by a given quantity of steam expanding through both cylinders of a compound engine, and that which would be done by the same steam, expanding to the extent, in the larger cylinder only. Prove the correctness of your answer.

NOTE.—*Answers should, as far as possible, be illustrated by sketches or diagrams.*

DRAWING.

Thursday, 4th April 1895.—9 *to* 12 *o'clock.*

Plane Geometry.

1. Two lines AB and CD are inclined to one another at 15°, but their point of intersection is not available. There is a point P between them. Describe a circle which will pass through the point and touch the given lines.

2. Draw a triangle whose sides are AB = 2.5 inches, BC = 3 inches, AC = 3.5 inches. Take a point P in AC .75 inches from A, and divide the triangle into 7 equal parts by lines drawn through Point P.

3. A circle 12.5 inches diameter rolls upon another circle 18.5 inches radius, and inside it. Trace the path of a point 6.75 inches outside the rolling circle, and rigidly attached to it, through one revolution of that circle. State the names given to the two circles and the curve traced.

Solid Geometry.

1. The three corners of an equilateral triangle of 3.75 inches side are 1.5, 2.25, and 3.5 inches above the paper. Determine the plane containing the triangle, and draw its plan. Add an elevation on a vertical plane, the ground line being parallel to the shortest side in plan.

2. A pentagonal prism, base 2 inches, side, $5\frac{1}{2}$ inches long, stands on one end, with one of its faces inclined 15° to the vertical plane. Determine the projections and the true form of the section made by a

cutting plane whose traces are inclined, the vertical 40°, and the horizontal 55° to XY. Shew development of cut surface of solid.

3. Make an isometric projection of the cast iron weight shown on the dimensioned sketch given.

Thursday, 4th April 1895.—2 *to* 5 *o'clock.*

From one or other of the figured sketches supplied :—

(1) Crosshead with slipper slides;

(2) Iron roof truss ;

make the detailed drawings indicated.

Inking in is unnecessary.

Public Health.

MEDICINE.

Monday, 2nd July 1894.—10 *to* 12 *o'clock.*

1. State your opinion as to the nature and mode of propagation of Influenza.

2. Describe the precautions which should be taken when an outbreak of Smallpox threatens.

3. Explain the morbid Anatomy and Pathology of Diphtheria.

SANITARY LAW.

Monday, 2nd July 1894.—1 *to* 3 *o'clock.*

1. Building Bye-Laws.

The Sanitary Authority of a manufacturing town are engaged in the compilation of a code of Building Bye-Laws, and they contemplate adoption of the following clauses as regards filth receptacles :—

"The situation, dimensions, materials, and construction of every newly constructed water-closet and privy shall be subject to the approval of the Local Board.

"Every water-closet or privy shall have an opening, as near to the top as practicable, communicating directly with the external air, or shall be otherwise furnished with sufficient means of ventilation.

"Every cesspool shall be made water-tight, and shall be arched or covered over, and a pipe or shaft for ventilation shall be carried up from it or from the drain communicating with it from the water-closet or privy into the open air, above the roof of the building for which it is used.

"The situation, dimensions, materials, and construction of every newly constructed ashpit shall be subject to the approval of the

Local Board, and shall be of sufficient size to contain the ashes and dry refuse likely to accumulate between the prescribed visits of the scavenger."

You are required to comment on these proposed clauses, and to point out the defects (if any) from the legal and the sanitary standpoints respectively.

You are at liberty to recast these Bye-Laws in a sense better calculated to give effect to the principles that you consider should be held in view.

II. Vaccination Acts.

Give a short summary of the leading provisions of the Vaccination Acts now in force.

III. Nuisance from Pig-keeping.

In order to reduce the nuisance from pig-keeping to a minimum, the Sanitary Authorities of two districts, one "urban," the other "rural," propose to make Bye-Laws, to the effect that the occupier of any premises shall not keep swine, or deposit any swine's dung, within the distance of 100 feet from any dwelling-house.

State whether such a proposal would be legally justified in each of the cases referred to above, and quote any leading cases of which you have knowledge in support of your contentions.

VITAL STATISTICS.

Monday, 2nd July 1894.—3 *to* 4 *o'clock.*

I. Density of Population.

Describe the general relation between density of population and the incidence of disease and death. In considering this question, what other factors besides aggregation of population upon area have to be taken into account?

II. Seasonal Prevalence of Disease.

Describe the mean seasonal curve of mortality in each of the so-called "seven principal zymotic diseases."

III.

Describe the method by which you would obtain the "corrected death-rate" of a large town. In what respects does the "corrected death-rate" usually differ from the recorded death-rate in large towns and in country districts respectively, and to what causes are these differences due?

PRACTICAL SANITATION.

Tuesday, 3rd July 1894.—10 *to* 12 *o'clock.*

I. Smallpox Hospital.

The Sanitary Authority of a large town propose to erect an isolation hospital for Smallpox, and it is suggested that, with a view to minimise the danger of spreading the disease from such hospital, it should be built in accordance with the accompanying plans and specifications.

You are asked to comment on each of such particulars as in your view are likely to favour, as well as those which appear likely to fail, in fulfilling the objects in view.

II. Inspection of Ships.

State concisely the steps you would take to ascertain the sanitary condition of a vessel of say 2000 tons. To what special points would you direct your attention in the case of a wooden and of an iron vessel respectively?

III. Examination of Water.

You are required to advise a Sanitary Authority as to (*a*) the wholesomeness of a proposed supply of water, and (*b*) as to whether or not a certain water-supply has been the means of disseminating enteric fever.

What value would you attach to chemical and to bacteriological examination respectively of the water as furnishing data for your guidance in determining these questions?

N.B.—*All answers to be illustrated, as far as possible, by sketches.*

PRACTICAL SANITATION, MENSURATION, AND DRAWING.

Tuesday, 3rd July 1894.—1 *to* 4 *o'clock.*

(*Four Questions only are to be attempted, of which Nos.* 4 *and* 5 *must be two.*)

1. Give sketches of the various methods of laying out land for the purpose of sewage irrigation, and discuss the merits of each.

2. What characteristics would enable you to satisfy yourself as to the quality of each of the following when used in connection with sanitary works:—A consignment of bricks; an earthenware drain pipe; a wiped joint; a C.I. water pipe?

3. Give sketches of an approved form of filter bed as a part of a town's system of water-supply, showing the disposition of the filtering

material, and how the rate of filtration may be regulated. In an average case, how many gallons per square yard of surface should be allowed to pass in twenty-four hours?

4. What factors enter into the calculation of the quantity of water that will flow in a given time through (*a*) a given pipe, (*b*) along an open channel?

A circular earthenware sewer is 1 ft. in diameter, has a fall of 1 in 100, and flows half bore. Calculate its discharge.

5. From the accompanying figured sketch of a Mansergh-trap, make the drawings indicated.

N.B.—*Answers should, as far as possible, be illustrated by sketches or diagrams.*

Agriculture.

AGRICULTURE.

Wednesday, 27th March 1895.—9 *to* 12 *o'clock.*

1. When a farmer (*a*) lets his turnips to be eaten on the land by sheep; (*b*) lets his turnips and straw to be consumed in his courts; (*c*) lets his hay-aftermath to be consumed by lambs; what conditions does he make, and what price does he secure?

2. Describe the management and feeding of a herd of dairy cows, where milk-selling is the main object.

3. Enumerate the "points of the Shorthorn, and give a short history of the breed.

4. Calculate how long an acre of Swedish turnips (average crop) will keep a score of fattening hoggs. What quantity and kind of supplementary food would you suggest should be given? What aggregate quantity of mutton might the roots and other food be expected to produce?

5. Shew by a calculation whether it pays best to sell milk at 6d. per gallon, to sell cream at 5s. per gallon, to make butter at 1s. per lb., or to make Cheddar cheese at £3 per cwt.

6. Assuming that you wanted to establish a herd of heavy-milking Shorthorn cows, describe your method of procedure during the first few years.

7. Describe the identification and life-history of the Horse Bot Fly and Sheep Tick (*Ixodes*). Indicate any districts in Great Britain where these pests are abundant.

8. Give an account of the management and feeding of a polled Angus steer from the time of its birth till it is ready for a Christmas fat-stock show.

AGRICULTURAL CHEMISTRY.

Wednesday, 27th March 1895.—1 *to* 3 *o'clock.*

1. Give the average percentage of Potash in Commercial "Muriate," Sulphate, and Kainit, and state reasons for preferring one or other of these salts, in anticipation of the season being one of low, average, or high rainfall.

2. How would you detect the following named adulterations in a sample of Linseed Cake :—

(*a*) Rape Seed ;
(*b*) Locust Meal ;
(*c*) Millet Seed ?

3. Compare the retention by soils of Nitrate of Potash, Sulphate of Ammonia, and Nitrate of Soda, and give reasons for any differences you describe.

4. What are the chief physical and chemical changes brought about by the application of lime—

(*a*) To a clay soil ;
(*b*) To a boggy soil ?

5. What are Zeolites, and in what way does their presence in the soil affect its fertility ?

6. What are the three chief nitrogenous substances contained in fodders ? What tests would you employ to detect their presence, and how would you make a quantitative estimation of one of them ?

VETERINARY HYGIENE.

Monday, 25th March 1895.—1 *to* 3 *o'clock.*

1. Describe the kind of land upon which braxy in sheep would occur.

2. Give the causes and symptoms of "liver rot" in sheep.

3. Describe the precautionary measures to be adopted after parturition in the cow.

4. State what you know of the diagnosis and treatment of a case of spasmodic colic.

5. Briefly describe the foot of the horse.

6. What are the general methods you would adopt in the prevention of the spread of an epizootic ?

ENGINEERING.

Wednesday, 3rd April 1895.—9 *to* 12 *o'clock.*

1. Exhibit two methods of measuring the distance of an inaccessible object without the aid of an angular instrument.

2. What is "parallax" ? How would you adjust so as to prevent it in the Theodolite ?

3. In what does the Circumferenter differ from the Prismatic compass?

Shew how to plot a needle-survey by the method of co-ordinates.

4. Using the height of the optical axis of the instrument above datum, shew, by an example, how to reduce and balance a level-book.

5. Define "unit of work" and "horse-power."

It is required to raise water from three different levels, 40, 70, and 90 fathoms respectively, below the surface. From the first 20 cub. ft., from the second 10 cub. ft., and from the third 35 cub. ft. are to be drawn per minute. What must be the H.P. of the engine employed?

6. State the so-called laws of solid friction, and mention under what circumstances they have been observed to fail.

If a horse draws a gross load of a ton and a half along a road, the frictional co-efficient of which is $\frac{1}{20}$, what tractive force must it exact if (*a*) the road be level; (*b*) if it rises 35 ft. in a mile?

7. What is the difference between an overshot water-wheel and a free-flow turbine?

How much water per minute must pass over a 16 ft. fall in order to yield four effective horse-power in a motor whose efficiency is .78?

8. A 40 ft. derrick-pole of uniform section and density, weighing 2 cwt., is guyed by a 50 ft. rope staked to the ground 20 ft. from the foot of the pole. If a ton and a half be hung from the derrick, what is the amount and nature of the stress in the guy?

9. What do you know about the manufacture, uses, and testing of Portland cement?

10. The winch-handle of a crane is 1.4 ft. long; the number of teeth on the pinion, 6; on the barrel-wheel, with which the pinion gears, 30; and the diameter of the wheel-axle is 4 in. What force must be applied to the handle in order to lift a weight of two tons?

11. What is an "adiabatic curve"?

The actual pressure of the steam when admitted to the cylinder of an engine, is 45 lbs. per sq. in. If it be cut off at one-third, what will the pressure be at one-half, and at the end of the stroke?

12. Define the following:—Lap; lead; slide valve; throw of eccentric. Upon what does the amount of the last named depend?

13. What timbers would you use for each of the following purposes, and why?—Foundation of a bridge-pier; a cart wheel; lock-gate in fresh water; a pontoon in salt water; tie-beam of a roof; a pulley-block.

NOTE.—*Answers should, as far as possible, be illustrated by sketches or diagrams.*

Degrees in Science.

DOCTORS OF SCIENCE.

The names of all the Doctors of Science of this University, previously to 1889, will be found in the Historical Appendix to List of Graduates published in 1889, pp. 132-134. The following are the names of the Doctors from 1889 to 1895, both years included :—

In Mental Science.

1891. William Mitchell, M.A.
,, Robt. Mark Wenley, M.A.
1892. Chas. Mackinnon Douglas, M.A.
,, Jas. Lewis M'Intyre, B.A.
1893. William Ingram, M.A.
1893. Purnananda Chatterji.
1894. William Caldwell, M.A.
1895. John Gunn, M.A.
,, Sydney Herbert Mellone, B.A.

In Philology.

1893. Harry Angus Alexander Kennedy, M.A.
1894. George Barnet Gardiner, M.A.

In Pure Science.

1889. Thomas Rhymer Marshall (Chemistry).
1890. Alex. Crichton Mitchell.
,, Hugh Marshall.
1891. William Cossar Mackenzie.
,, Thomas Smith Murray.
1892. Jacques François Marais, B.A. (Chemistry).
1893. John Shields (Chemistry).
1894. Malcolm Laurie, B.Sc.
,, Charles Hunter Stewart, M.B., C.M., B.Sc.

In Public Health.

1890. James Anderson, M.D.
,, James Andrew Blair, M.B.
,, William John Brock, M.B.
,, John Stevenson, M.B.
1892. Charles Henry Bedford, M.D.
,, Robt. Wm. Dickinson Mac-Martin Cameron, M.D., B.Sc.
,, Alex. Cruikshank Houston, M.B., C.M., B.Sc.
,, William George Aitchison Robertson, M.D., B.Sc.
1893. Edward Henry Ezard, M.D., B.Sc.
,, John Howard-Jones, M.B., B.Sc.
,, John Fred. Joseph Sykes, M.B., B.Sc.
,, James Buchanan Young, M.B., B.Sc.
1894. Henry Halcro Johnston, M.D., B.Sc.
,, John Macmillan, M.A., M.B., C.M., B.Sc.
,, Charles Templeman, M.D., B.Sc.

Degrees Conferred in 1894-95.

THE DEGREE OF DOCTOR OF SCIENCE.

In Mental Science.

John Gunn, M.A. (Edin.). *Thesis*—"A Critical Examination of Locke's 'Essay on the Human Understanding.'"

Sydney Herbert Mellone, B.A. (Lond.). *Thesis*—"The Place of Feeling in Mental Life."

In Zoology.

1st August 1894.

Malcolm Laurie, B.Sc. *Thesis*—"Studies in Arachnid Morphology."

In Chemistry.

1st August 1894.

Charles Hunter Stewart, M.B., C.M., B.Sc. *Thesis*—"On the Quantitative Determination of Carbon in Organic Substances by the Kjeldahl Process, and its application to the Analysis of Potable Water."

In Public Health.

1st August 1894.

Henry Halcro Johnston, M.D., B.Sc. *Thesis*—"On the relative efficiency of certain Filters for removing Micro-Organisms from Water; with special reference to the Nordtmeyer-Berkefeld and Pasteur-Chamberland Filters."

John Macmillan, M.B., C.M., B.Sc. *Thesis*—"An Investigation into the condition of the Atmosphere of Cow-houses and Stables in Edinburgh, Leith, and the County of Mid-Lothian." (*In absentia.*)

Charles Templeman, M.D., B.Sc. *Thesis*—"An Experimental Inquiry into the effect of Freezing on the Bacillus of Anthrax, Bacillus of Typhoid, and the Bacterium Coli Commune in Potable Water."

THE DEGREE OF BACHELOR OF SCIENCE.

In Pure Science.

1st August 1894.

James Kerr.
Sutherland Simpson.
James Wilson Tullo.

27th October 1894.

Malur Srinivasa Rau, M.A.

17th April 1895.

George Waterston Miller. | *James Alexander Murray.
William Morrison, M.B., C.M.

* *Passed with Special Distinction in Zoology and Comparative Anatomy.*

In Engineering.

17th April 1895.

Robert Anderson Gray. | John Edward Pickles, M.A.
John Inglis. | John Keith Ross, M.A.

In Public Health.

1st August 1894.

Thomas Fentem, M.B. | Louis Godfrey Irvine, M.B.
John Garvie, M.B. | Thomas John Jehu, M.B.
Bertram Whewell Hogarth, M.B. | Charles Parker Stewart, M.B.

27th October 1894.

John Penny, M.B., C.M.

In Agriculture.

1st August 1894.

William Henry Brendon. | Robert Sutherland Seton.

Fellowships, Scholarships, Bursaries, Prizes, &c., in Science.

I.—FELLOWSHIPS.

I.—THE FALCONER MEMORIAL FELLOWSHIP.

This Fellowship was founded in 1869 by the Subscribers to the Fund for a Memorial to Hugh Falconer, M.D. (for many years Superintendent of the H. E. I. Company's Botanic Gardens at Saharunpoor and Calcutta), and the Association for the better Endowment of the University of Edinburgh. It is of the annual value of £112, 0s. 4d.; and is for the encouragement of the Study of Palæontology and Geology. It is tenable for two years, but if the Senatus see fit, it may be held for three years, and with consent of the University Court, for four years, and is awarded after competitive examination in Natural History as applied to Palæontology and Geology. It is open to Graduates in Science or Medicine of this University of not more than three years' standing at the time of the competition. It cannot be held along with any other

Fellowship, Scholarship, or Bursary in any Scottish University. The Deed of Foundation will be found at p. 270 of the CALENDAR for 1870-71. The next appointment will be made in July 1897.

1891. No award.
1892. G. S. Corstorphine, B.Sc.

II.—GEORGE HERIOT FELLOWSHIP.

This Fellowship, for Research in Mathematical, Physical, Experimental and Natural Science, is open triennially. The next competition will be in 1897. For further particulars see under "Faculty of Arts."

II.—SCHOLARSHIPS.

I.—BAXTER PHYSICAL SCIENCE SCHOLARSHIP.

This Scholarship was founded by Sir David Baxter, Bart., of Kilmaron, in 1865, and is of the annual value of £74, 15s. 4d., tenable for two years. It is awarded, on the result of the Final Examination for the Degree of Bachelor of Science, to the student who is most distinguished in two or more of the Physical Science subjects—viz., Mathematics, Natural Philosophy, Astronomy, Chemistry. The holder is required to satisfy the Senatus Academicus that he has been pursuing his studies in Science during the first year of his tenure in such manner as the Senatus may fix. It cannot be held with any other Scholarship, Fellowship, or Bursary, or with any situation yielding an annual income of £100.

1892. James Rennie, B.Sc. | 1894. *Bertram Prentice, B.Sc.*

II.—BAXTER NATURAL SCIENCE SCHOLARSHIP.

This Scholarship was founded by Sir David Baxter, Bart., of Kilmaron, in 1865, and is of the annual value of £74, 15s. 4d., tenable for two years. It is awarded, on the result of the Final Examination for the Degree of Bachelor of Science, to the Student who is most distinguished in two or more of the Natural Science subjects –viz., Human Anatomy, including Anthropology; Physiology, including Histology; Geology, including Mineralogy; Zoology, including Comparative Anatomy; Botany, including Vegetable Histology. The holder is required to satisfy the Senatus Academicus that he has been pursuing his studies in Science during the first year of his tenure in such manner as the Senatus may fix. It cannot be held with any other Scholarship, Fellowship, or Bursary, or with any situation yielding an annual income of £100.

1891. John Stewart Norwell, B.Sc., resigned.
,, Lapsed Scholarship, James Adamson, M.A., B.Sc.
1892. G. S. Corstorphine, B.Sc.
1893. Lapsed Scholarship, Gregg Wilson, M.A.
1894. *John Smith Flett, M.A., B.Sc.*

III.-VIII.—VANS DUNLOP SCHOLARSHIPS.

These Scholarships may be held by Science Students. They are each of the annual value of £100, and are tenable for three years, on condition that the scholar submits annually—(1.) A certificate of attendance on lectures or laboratories approved by the Senatus; or (2) a certificate of having acted as an assistant to a Professor in this or some other University; or (3) a written report of his work done during the year, together with a Thesis composed by himself in connection with some part of that work. For General Regulations, see under Faculty of Arts.

III.—MATHEMATICS.[1]

The next Competition will take place in April 1898.

IV.—NATURAL PHILOSOPHY.[1]

The next Competition will take place in April 1898.

V.—AGRICULTURE AND RURAL ECONOMY.

This Scholarship is open to all Matriculated Students who have regularly attended classes in the University for not less than two and not more than six years, and who have attended the Class of Agriculture and Rural Economy within two years of the date of Competition. The subjects of Examination are Agriculture, Chemistry, Botany, and Veterinary Science. For General Regulations, see under Faculty of Arts. The next Competition will take place in April 1898.

The Examiners are the Professor of Agriculture and an Examiner nominated by the Senatus.

1892. T. A. Coward. | 1895. *J. W. Paterson, B.Sc.*

VI.—CHEMISTRY AND CHEMICAL PHARMACY.[2]

The next Competition will take place in March 1897.

VII.—NATURAL HISTORY, INCLUDING GEOLOGY AND BOTANY.[2]

The next Competition will take place in April 1898.

VIII.—ENGINEERING AND MECHANICAL AND USEFUL ARTS.

The Examination is similar to that for the Second B.Sc. Examination for the degree in Engineering, with the addition of questions on prescribed books treating of Engineering and Mechanical and useful Arts.

The Competition is open to all Matriculated Students who have been in regular attendance on the Class of Engineering for at least two Winter Sessions, and who have not been Students of the University

[1] For particulars, see "Scholarships" in Faculty of Arts.
[2] For particulars, see "Scholarships" in Faculty of Medicine.

for more than four years. For General Regulations, see under Faculty of Arts. The next Competition will take place in April 1897.

The Examiners are the Professors of Engineering and Natural Philosophy.

1891. J. R. Dick, B.Sc. | 1894. *W. G. Rennie, B.Sc.*

IX.—STEVEN SCHOLARSHIP IN AGRICULTURE.

This Scholarship was founded in 1882 by the Misses Steven of Bellahouston in memory of their brother Moses Steven, Esq. It is of the value of £75, and is awarded annually, in connection with the Class of Agriculture, the subjects of examination being Agriculture and General and Agricultural Chemistry.

The Scholar is required to visit the annual exhibitions of the four leading agricultural societies, or such as the Professor of Agriculture shall appoint, and to report on his visit or visits to the satisfaction of the Professor of Agriculture. The Exhibitions which the Scholar is required to visit are:—

The Royal Agricultural Society of England.
The Bath and West of England Agricultural Society.
The Highland and Agricultural Society of Scotland.
Royal Agricultural Society of Ireland.

See Deed of Foundation at p. 397 of CALENDAR for 1882-83.

1891. John Campbell.
1892. George P. Foaden.
1893. Alexander Goodfellow.
1894. John W. Paterson.
1895. *John Leslie*, } equal.
,, *F. P. Walker*, }

X., XI.—HOPE PRIZE SCHOLARSHIPS.

Two Hope Prize Scholarships have been instituted in connection with the Chemical Laboratory of the University, each of the value of about £30 per annum, tenable for one year, and to be awarded annually at the end of the Winter Session. Each Scholarship is awarded to the student whom the Professor of Chemistry thinks most deserving of those who have worked during that Winter Session in the Chemical Laboratory of the University. The scholars must work during the Summer and Winter Sessions succeeding their appointment in the Chemical Laboratory of the University, and must assist the Professor of Chemistry in such manner as he thinks fit in each case, and the scholars are not required to pay fees for the laboratory. In case of resignation of a scholar, or of a scholar failing to fulfil the conditions, the Professor of Chemistry may, if he thinks proper, recommend a student working in the Chemical Laboratory for the remainder of the Scholarship so become vacant, the new scholar so appointed to perform the duties and receive the payments during the

remainder of the time for which his predecessor was appointed. Scholars may, in cases of great distinction, be appointed for a second time.

1891. Theodore Rettie.
1892. William White Taylor.
1893. A. F. Watson.
1894. Matthew Marshall.
1895. *Robertson Borthwick, J.P., Longstaff.*

XII.—NEIL ARNOTT SCHOLARSHIP IN EXPERIMENTAL PHYSICS.[1]

Is awarded annually in April.

XIII.—THE MACKAY SMITH SCHOLARSHIPS.

These Scholarships were at first intended to have been held in Edinburgh and Glasgow Universities alternately, and were so held in Edinburgh for the Sessions 1883-84 and 1884-85, and in Glasgow for the Sessions 1885-86 and 1886-87. It was, however, afterwards arranged, instead of the Scholarships alternating between the two Universities, that the proceeds of the present investment should be divided—one half being retained by the University of Edinburgh, and the other half transferred to the University of Glasgow, so that each University now acts independently. The portion of the proceeds at present falling to Edinburgh is £50 annually, which provides one Scholarship in Natural Philosophy and one in Chemistry, each of the annual value of £25, tenable for two years, and to be held under such regulations and conditions as the Senatus may from time to time direct. The Scholarship in Natural Philosophy is open for competition to Students who have attended the Class of Natural Philosophy, and the Scholarship in Chemistry to Students who have attended the Class of Chemistry, both in this University. The successful Candidate for the Scholarship in Natural Philosophy is bound to attend the Class of Natural Philosophy, or to prosecute the study thereof, in the University during at least one year of his tenure of the Scholarship, in such way as the Senatus may direct or approve; and the Scholarship in Chemistry is held under similar conditions as regards attendance on the Class of Chemistry, or the prosecution of the study thereof. The next Competition for these Scholarships will take place in April 1896.

1892. *J. W. Horne*, M.A. (Chem.)
1892. J. G. Anderson (Nat. Phil.)
1894. *George Thomson* (Chem.)
1894. *J. F. Cameron* (Nat. Phil.)

XIV.—ROYAL COMMISSION FOR EXHIBITION OF 1851 PHYSICAL SCIENCE SCHOLARSHIP.

The Commissioners in 1891, and again in 1892, gave this University the power of nominating a Student of not less than three years' standing

[1] For particulars, see "Scholarships" in Faculty of Arts.

to a Scholarship of £150 a-year, tenable for two years, and which may be extended to three years. The Scholarship is limited to those branches of Science (such as Physics, Mechanics, and Chemistry) the extension of which is specially important for the national industries, and may be tenable in any University or other Institution to be approved by the Commissioners. See Regulations, p. 544 of CALENDAR for 1891-92.

1891. John Shields, B.Sc., Ph.D.
1892. Andrew J. Herbertson.
1893. H. W. Bolam, B.Sc.
1894. J. C. Beattie, B.Sc.
1895. *J. D. F. Gilchrist, M.A., B.Sc.*

XV., XVI.—THE ARTHUR TREVELYAN SCHOLARSHIPS IN ENGINEERING.

Two Arthur Trevelyan Scholarships in Engineering, of about £15, 12s. per annum, for proficiency in Engineering and the Mechanical and useful Arts, tenable in this University for two years. Candidates must not be more than nineteen years of age, must have passed the preliminary examination or its equivalent; and must not have attended more than one winter and one summer course in Engineering and field work respectively, either in this University or elsewhere. The subjects of examination are (*a*) Mathematics, as far as the subjects required for the first B.Sc. examination in Engineering; (*b*) Physics to the same extent; (*c*) Engineering (the subjects of the previous winter session and field work); (*d*) geometrical drawing and elementary graphics. See Excerpt from Deed, page 538 of CALENDAR for 1892-93. One Scholarship is awarded annually in November.

XVII., XVIII.—MISSES BAXTER OF BALGAVIE'S SCHOLARSHIPS.

These Scholarships were instituted in 1868 and 1878 by Miss Mary Baxter of Balgavie. They are three in number, two of the annual value of £40, the third of £20. They are in the gift of the Directors of the High School of Dundee, and are open for competition to all pupils who shall have finished their course at the time, or within one year previously, at that School. The examination is held in Dundee by examiners appointed by the Directors, and the subjects are Geometry, Algebra, Trigonometry, and Mechanical Drawing. The Scholarships are tenable for one year certain, and for a second if a favourable certificate is sent to the Directors by the Senatus Academicus. The patrons may extend the tenure of these Scholarships for a further period of one year, provided the holder shall have previously passed the First Examination for the Degree of Bachelor of Science in the Department of Engineering in this University. The Classes to be attended during the first two years are Mathematics, Natural Philosophy (two courses), Engineering (two courses), and Chemistry, and may (by resolution of

the Senatus), be attended in any order most convenient to the scholar, provided he intimate his intentions to the Dean of the Faculty of Science beforehand. In the event of a third year's tenure, the Scholar may attend any two classes selected by himself and approved by the Senatus.

These Scholarships are not to be held with any other Scholarship, Fellowship, or appointment yielding £50 per annum. *See* Deeds of Foundation, at page 255 of the CALENDAR for 1869-70, at p. 372 of CALENDAR for 1878-79, and at p. 377 of the CALENDAR for 1881-82.

THE WILLIAM DICKSON TRAVELLING FUND.

This is a fund for the purpose of assisting Graduates of any Faculty, of not more than three years' standing, to travel for the purpose of study or research. For particulars, see p. 358.

THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is in the patronage of the Trustees of the British Museum, and is of the annual value of £144. The Trustees may appoint any Graduate in any Faculty of the University who has obtained his degree after examination. The office is tenable for five years, at the expiration of which period the Lecturer is ineligible for the next election. The number of lectures is not to be less than twelve in each year, nor more than three in the same week. The course is required to be annually delivered between the first of November and the end of July following, at such public places in the United Kingdom as the Trustees shall approve. The public are admitted without fee. The Lecturer is required at the termination of each course to deposit a copy, or full extract of such course of lectures, with the Principal Librarian of the British Museum, to whom application may be made for further particulars.

Of the foregoing Fellowships, Scholarships, Bursaries, and Prizes, the following are open during the Winter Session 1895-96.[1]

SCHOLARSHIPS.[1]

1, 2. *Two Hope Prize Scholarships in Chemistry.* See Nos. X. and XI., page 480.

3. *Neil Arnott Scholarship for Experimental Physics*, of £38, 10s.,

[1] For further information, and for information regarding other Fellowships, Scholarships, Bursaries, and Prizes, see above, where full information regarding the conditions and values, &c., are given. The values of the Fellowships, Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise and fall of the rate of interest, &c. The University Authorities reserve the right to exclude Candidates who do not comply with the Regulations as to Entering, &c., for Scholarships, Bursaries, &c.

is awarded annually to the most distinguished student in the Physical Laboratory.

4. *Arthur Trevelyan Scholarship* for proficiency in Engineering and the Mechanical and Useful Arts. See No. XV., page 482. The Examination will begin on Saturday, 2nd November, at nine o'clock. Names to be given in *on or before* 15th October.

5. *Steven Scholarship in Agriculture* (No. IX., page 480). The Subjects of Examination are Agriculture and General and Agricultural Chemistry. The competition will take place in March 1896, viz., Agriculture, 25th March, at 9 ; Agricultural Chemistry, at 1. Candidates to enter names *on or before* 13th March.

Competitors for Fellowships and Scholarships must have studied the subjects of Examination at the University of Edinburgh. No Fellowship or Scholarship can be held along with any other Fellowship or Scholarship.

BURSARIES.[1]

1. *One Sibbald Bursary*, of £30 a-year, tenable for three years.[2]

2-7. *Six Heriot Bursaries*, each of the annual value of £30, and tenable for three years.[2]

8. *Renton Bursary*, of about £18, 8s. 6d.[2] The Examination is in English and Elementary Mathematics, and will take place on Saturday, November 2, at 10 o'clock. Names of Candidates to be entered at the Matriculation Office, *on or before* 25th October.

9. *The Donald Fraser Bursary*, of £50.[2]

10-13. *Four Buchanan Bursaries.*[2]

University Bursaries cannot be held along with any other Bursary.

PRIZES.[1]

1. *The Gunning Victoria Jubilee Prize in Chemistry.*[3]

2, 3. *Two Newton Bursaries or Prizes.*[2]

4. *The Kelland Memorial Prize in Mathematics.*[2]

5. *The Lord Rector's Prize.*[2]

6. *The Ellis Prize in Physiology.*[3]

7, 8. *Two Gray Prizes.*[2]

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[1] See footnote, page 483.
[2] See under Faculty of Arts.
[3] See under Faculty of Medicine.

WILLIAM DICKSON TRAVELLING FUND.

The William Dickson Travelling Fund (page 358).

N.B.—*Scholars, Bursars, or Fellows must apply to the Dean of the Faculty of Science for Certificates to entitle them to draw the instalments due of Science Scholarships, &c., and to the Factor for payment thereof, within three months after they have become payable, otherwise they will be regarded as having resigned. Any who desire to resign must at once announce this to the Dean and to the Factor.*

JAMES GEIKIE, D.C.L., LL.D., F.R.S., &c.,
Dean of the Faculty of Science.

III.

FACULTY OF DIVINITY.

1895-96.

Dean.

PROFESSOR MALCOLM CAMPBELL TAYLOR, D.D., &c.
6 *Greenhill Park.*

Programme of Classes.

FACULTY OF DIVINITY.

The Classes will be opened as follows :—

Classes.	Days of Opening, and Hours of Lectures.	Professors.	Class Fees.
Divinity.....	29 Oct., 12 o'cl.	Prof. Flint, ...	£3 3
Ecclesiastical History.	29 Oct., 11 ,,	Prof. Taylor,....	3 3
Biblical Criticism.....	29 Oct., 10 ,,	Prof. Charteris,.	3 3
Hebrew—Junior Cl. .	29 Oct., 1 ,,	Prof. Kennedy,.	3 3
Senior Cl. .	29 Oct., 2 ,,	.....	3 3
Arabic—Junior Class. (*Mond., Wed., & Frid.*)	1 Nov., 3 ,,	.....	3 3
Syriac—Senior Class. (*Tues. & Thurs.*)	29 Oct., 3 ,,	.....	2 2

THE SUMMER PREPARATORY CLASSES IN ELEMENTARY HEBREW AND ELEMENTARY ARABIC, conducted by the Class-Assistant under the superintendence of the Professor, open on 1st May, at 10 A.M. and 11 A.M. Fee for Hebrew, £1, 11s. 6d. ; and for Arabic, £2, 2s.

GIFFORD LECTURESHIP, for "promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term." *Lecturer*—Emeritus-Professor CAMPBELL FRASER, D.C.L., LL.D.

The arrangements for the Course in 1895-96 will be announced before the beginning of the Session.

GUNNING VICTORIA JUBILEE LECTURESHIP IN NATURAL SCIENCE. *Lecturer*, ADAM MILROY, D.D.

This Course of Three Lectures will be delivered in January, or during the first fortnight of February, at dates to be afterwards announced. Subject : "The Advantages to Clergymen of Natural, Linguistic, and Sociological Study."

Class-Assistant in Hebrew and Semitic Languages . . — DAVID MILLER KAY, B.D., B.Sc.

Class Assistant in Divinity . — WILLIAM HASTIE, D.D.

Examiners for Degree of B.D. — GEORGE GARDINER, B.D. ; ARTHUR POLLOK SYM, B.D.

MATRICULATION FEES.

For the Academical Year, 1st October to 1st October, . £1 1 0
For the Summer Session only, 1st May to 1st October, . 0 10 6

CURRICULUM FOR THE MINISTRY IN THE CHURCH OF SCOTLAND.

The Laws of the Church of Scotland require that every Theological Student, who desires to qualify himself for the Ministry, should attend the Class of *Divinity*, either during *three full and regular Sessions*, or during *two regular and three partial Sessions*;—and also that he should regularly attend during two Sessions each of the Classes of *Hebrew*, *Ecclesiastical History*, and *Biblical Criticism*.

Entrance Examinations.

(1.) Students, before enrolment *for the first year* of their curriculum with a view to the Ministry in the Church of Scotland, must produce to the Professor of Divinity Certificates of their having satisfactorily undergone an Examination in the subjects embraced in the *Curriculum of Arts*, and also in the Elements of Hebrew Grammar. By Act IX. of General Assembly 1872, it is ordained that this Examination shall be conducted at each of the four Scottish Universities, shortly before the commencement of every Session, by four Examining Committees, consisting of members elected by the adjoining Synods, with Conveners nominated by the General Assembly. *The Convener of the Committee for the University of Edinburgh is the Rev. John Alison, D.D., Minister of Newington.* The time of the Committee's meeting and the prescribed subjects of Examination will be timeously advertised in the *Mission Record* of the Church of Scotland.

(2.) Students, before enrolment at the beginning of *every Session after the first* of their course in Divinity, must produce certificates of their having satisfactorily undergone the Examinations prescribed by their respective Presbyteries. For subjects of Examination prescribed by the *Presbytery of Edinburgh*, see *Appendix to Calendar.*

Discourses.

Every Student of Divinity is required during his curriculum to deliver with approbation *six* Discourses upon subjects prescribed by the Professor of Divinity, viz., a Homily, a Latin

Thesis, a Lecture, a popular Sermon, a Hebrew Exercise on a passage of the Old Testament, and an Exercise with additions on a passage of the Greek New Testament.

The following Regulations have been made by the Faculty of Theology in regard to the delivery of these Discourses. (1.) Students of the *first* year shall give in their *Homily* to the Professor of Divinity not later than 1st February ; (2.) Students of the *second* year shall give in their *Latin* Thesis not later than the 24th December, and shall be prepared to deliver their *Lecture* not later than the 10th January ; (3.) Students of the *third* year shall give in their *Hebrew Exercise* and their *Greek Exercise* with additions, not later than the 24th December, and shall be prepared to deliver their *Popular Sermon* not later than the 2nd of February.

Attendance at Foreign Universities.

The General Assembly of 1868, with the consent of a majority of Presbyteries, enacted and ordained :—(1.) That all Candidates for the ministry shall attend during at least *two sessions* the Theological Classes at one or more of the Universities of Scotland, and shall deliver, with approbation, the Six Trial Discourses required by the Acts of the General Assembly ; and (2.) That any Student who wishes to prosecute the remainder of his Theological Curriculum at any Protestant University or Universities not within the bounds of this Church, shall, before repairing thither, undergo satisfactory examination by the Presbytery with which he is connected, and shall, moreover, satisfy the same Presbytery in regard both to the Classes which he proposes to attend, and to the proficiency he has acquired in the language used in the Foreign University in which he intends to study.

Courses in the Faculty of Divinity.

I. DIVINITY.

PROFESSOR FLINT.

The course of study in this class extends over three Sessions. The Subjects of the Lectures during 1895-96 will be :—1. Theism. 2. Doctrine of the Trinity. 3. Revelation and Scripture. 4. Creation and Providence. 5. Biblical Doctrine of Man. 6. Biblical Doctrine of Sin.

Lectures will be delivered on Mondays, Tuesdays, Wednesdays, and Thursdays at 12 o'clock. Fridays will be devoted partly to the hearing of Discourses and Exercises, and partly to Lectures.

The work of the class includes two written examinations and an essay.

II. HEBREW AND SEMITIC LANGUAGES.

PROFESSOR KENNEDY.

A.—Hebrew.

Junior Class—1 *to* 2.

Grammar and Exercises (Davidson's Hebrew Grammar) from § 30. Translations into Hebrew Prose.

Reading and Explanation of easy Prose and Poetical Passages in the Old Testament. During Session 1895-96 the Book of Genesis, beginning at Chapter xxiv., and selected Psalms will be read.

Oral and Written Examinations.

After the Christmas vacation the Junior Class will meet on three days of the week, in two sections. On these days the Upper Junior will continue the reading of the Hebrew Scriptures with the Professor; the Lower Junior will revise the Grammar and read the early chapters of Genesis with the Class-Assistant.

There is also a Preparatory Class in Elementary Hebrew,

which meets during the SUMMER *Session, and for which the fee is* £1, 11*s.* 6*d.*

Senior Class—2 *to* 3.

Study of Davidson's Hebrew Syntax. Hebrew Prose Composition. Reading of unpointed texts.

Reading and Exposition of portions of the Historical, Poetical, and Prophetical Books of the Old Testament. For Session 1895-96 Exodus, Chaps. i.-xx.; Psalms, Book i.; Isaiah, Chaps. xl. *ff.*

Discussion of *Critical and Historical* Questions connected with the Books read.

Oral and Written Examinations.

The Senior Hebrew Class will be the Graduating Class in Hebrew for the Ordinary Degree of Master of Arts; and any student who desires to attend this Class with a view to Graduation in Arts must previously pass an examination, in accordance with Sects. IV. subs. 3 of the Ordinance.

The examination will include plain passages for translation from and into Hebrew, and grammatical questions.

Those who propose, in a subsequent Session, to take up Hebrew as one of their Graduation Subjects, will have an opportunity of attending the Junior Class in that language during the Session 1895-96.

B.—ARABIC—3 *to* 4.

During Session 1895-96 a Junior Arabic Class will meet on Mondays, Wednesdays, and Fridays.

Socin's *Arabic Grammar* (new English edition by the Professor, to be ready 1895); Bruennow's *Chrestomathy of Arabic Prose-pieces*, 1895; Nallino's *Chrestomathia Corani*, 1893; Arabic Composition.

Intending students are strongly advised to attend the Preparatory Class for beginners, which is conducted during the Summer Session by the Class-Assistant, under the superintendence of the Professor. The Class will study Socin's Arabic Grammar, Jacob's Bible Chrestomathy, and Lokman's Fables. The fee is £2, 2s.

For Session 1896-97 it is intended that there shall be an Advanced Arabic Class for the reading of Arabic poetry and the more difficult prose authors, and for practice in Arabic Composition.

C.—SYRIAC—3 *to* 4.

During Session 1895-96 a Senior Syriac Class will meet on Tuesdays and Thursdays.

The Syntax as in Noeldeke's *Syrische Grammatik.* The Extracts from Bar-Hebræus and Ephraim Syrus in Roediger's Chrestomathy (3rd edition). Readings in the Syriac Old Testament (including the Apocrypha). Syriac Composition.

For Session 1896-97 it is intended that the Syriac Class shall be of a more elementary nature, including study of the Accidence (Nestle's Syriac Grammar recommended), and reading of the Scripture extracts in Roediger's Chrestomathy, and of S. John's Gospel (Peshîttâ Version).

III. ECCLESIASTICAL HISTORY.

PROFESSOR TAYLOR.

1. *Lectures*—Mondays and Tuesdays.—On The Beginnings of Christianity.

2. *Lectures*—Wednesdays and Thursdays.—On The Reformation in Scotland from 1572.

3. *Text-Book*—Fridays.—Kurtz's "History of the Christian Church." First Division; Second Section.

The work of the class includes three written examinations.

For the Regulations of the Vans Dunlop Scholarship in "History,"—value about £100 annually for three years,—see in CALENDAR under "SCHOLARSHIPS IN ARTS" and "SCHOLARSHIPS IN DIVINITY."

IV. BIBLICAL CRITICISM AND BIBLICAL ANTIQUITIES.

PROFESSOR CHARTERIS.

It is intended to occupy the principal portion of next Session with (i.) Lectures on (*a*) Old Testament: the Poetical and

Prophetical Books ; (*b*) New Testament : the Pastoral Epistles of St Paul ; (ii.) (*a*) Introduction to Textual Criticism, as in Scrivener's "Introduction," chiefly the concluding part from Vol. II. ch. vii. (see the subject more shortly treated in Hammond's "Outlines," p. 71 to end) ; (*b*) early evidence for the Canonical Gospels, as in the Professor's text-book, "Canonicity" ; (iii.) First traces of formation and use of a Canon of Scripture, as in the Professor's "Canonicity."

There will be written and oral examinations, in which all regular students are required to take part ; and subjects of occasional voluntary essays will also be suggested.

LECTURESHIPS.

I.—GIFFORD LECTURES ON NATURAL THEOLOGY.

Lecturer—Emeritus-Professor CAMPBELL FRASER, Hon. D.C.L. (Oxford) and LL.D. (Glasgow and Edinburgh).

These Lectures were endowed by the late Adam Gifford, Senator of the College of Justice, "for promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term."

According to the Trust Deed, "the lecturers appointed shall be subjected to no test of any kind, and shall not be required to take any oath, or to emit or subscribe any declaration of belief, or to make any promise of any kind ; they may be of any denomination whatever, or of no denomination at all ; they may be of any religion or way of thinking, or, as is sometimes said, they may be of no religion ; or they may be so-called sceptics or agnostics or free-thinkers ;—provided only that the 'patrons' will use diligence to secure that they be able reverent men, true thinkers, sincere lovers of and earnest inquirers after truth. I wish the lecturers to treat their subjects as a strictly natural science, the greatest of all possible sciences, indeed, in one sense, the only science,—that of Infinite Being, without reference to or reliance upon any supposed special exceptional

or so-called miraculous revelation. The lecturers shall be under no restraint whatever in their treatment of their theme. The lectures shall be public and popular, that is, open not only to students of the Universities, but to the whole community, without matriculation."

II.—THE GUNNING VICTORIA JUBILEE LECTURESHIP.

Lecturer—ADAM MILROY, D.D.

With a view to promote the study of Natural Science among candidates for the ministry, and to bring out among ministers the fruits of study in Science, Philosophy, Language, Antiquity, and Sociology, Dr R. H. Gunning, of Edinburgh and Rio de Janeiro, has founded a Lectureship in the Faculty of Divinity of the University of Edinburgh, to be known as "The Gunning Victoria Jubilee Lectureship."

The Gunning Lectureship is a triennial appointment of the value of £100, and the appointment shall be made by the Faculty of Divinity. The lecturer may be any Scottish Presbyterian clergyman at home, or in the Mission field, eminent in Science, Philosophy, Language, Antiquity, or Sociology, and the Lectures may be delivered in the University of Edinburgh, or such other place as the Faculty may appoint.

The next appointment will be made at the close of Session 1895-96. See Revised Scheme, p. 519 of CALENDAR 1889-90.

Class Prize Lists.

SUMMER SESSION, 1894.

ELEMENTARY HEBREW.

FIRST-CLASS CERTIFICATES.—James B. Penman (*Medallist*) and Wm. Watson, M.A.

SECOND-CLASS CERTIFICATE.—Wm. M. Low.

ELEMENTARY ARABIC.

First-Class Certificates. — Walter R. Henderson, M.A., and Andrew Tweedie, M.A.

W. B. STEVENSON, B.D.
Assist. to Prof. of Semitic Languages.

WINTER SESSION, 1894-95.

DIVINITY.

THIRD YEAR.

Prizemen.—1. William Smith, M.A.; 2. T. Grahame Bailey, M.A.; 3. William J. Pennell, M.A.; 4. Alexander R. Howell, M.A., and Wellwood M. Landale, M.A.—equal.

Honourable Mention.—D. G. Hamilton, M.A.

SECOND YEAR.

Prizemen.—1. Sidney Smith, M.A.; 2. Walter R. Henderson, M.A.; 3. Thomas O. Duncan, M.A.; 4. George Drummond, M.A.; 5. John Henderson, M.A.

Honourable Mention.—James C. Colvin, M.A.; William Gracie, M.A.; and J. L. MacLean Watt, M.A.—Equal.

FIRST YEAR.

Prizemen.—1. James Wallace, M.A.; 2. James L. Buchanan, B.A.; 3. Andrew Mutch, M.A.; 4. James R. Murdoch.

Honourable Mention.—Wm. Goldie Boag.

R. FLINT, D.D., *Professor.*

BIBLICAL CRITICISM AND BIBLICAL ANTIQUITIES.

Prizemen.—1. William J. Pennell, M.A. (*Medallist*); 2. Thomas Grahame Bailey, M.A., and Walter R. Henderson, M.A.—equal; 4. Cameron Mackay; 5. William Meston, M.A.; 6. John Henderson, M.A., and Thomas O. Duncan, M.A.—equal.

Honourable Mention.—Thomas S. Macpherson, M.A.; David G. Hamilton, M.A.; Albert W. Bean; W. L. Gordon, M.A.

Special Prize.—Thomas W. Wilson, M.A.

Essays.—1. William J. Pennell, M.A.; 2. C. E. Stuart, M.A.; 3. Albert W. Bean and Wellwood M. Landale, M.A.—equal.

THOMAS NICOL, D.D.,
For A. H. CHARTERIS, D.D., *Professor.*

ECCLESIASTICAL HISTORY.

Prizemen.—1. James Wallace, M.A., Mid-Lothian (*Medallist*); 2. Thomas Grahame Bailey, M.A., Punjaub, and W. W. Reid, M.A.,

Inverness-shire—equal; 4. W. J. Pennell, M.A., Fife; 5. Wm. Smith, M.A., St Cyrus; 6. Thomas S. Macpherson, M.A., Argyllshire; 7. J. L. Buchanan, B.A., County Down, Ireland.

SPECIAL PRIZE.—L. Clarence D. Douglas, Edinburgh.

HONOURABLE MENTION.—Andrew Mutch, M.A., Aberdeenshire; James Cæsar, M.A., Dumfriesshire; D. Macfarlane, Argyllshire; David G. Hamilton, M.A., Birkenhead.

W. HASTIE, D.D.,
For M. C. TAYLOR, D.D., *Professor.*

HEBREW AND SEMITIC LANGUAGES.

JUNIOR HEBREW CLASS.

FIRST-CLASS HONOURS.—1. James B. Penman, M.A., Stranraer (*Medallist*); 2. W. W. Reid, M.A., Inverness-shire; 3. William Bell, Perthshire; 4. James Wallace, M.A., Mid-Lothian.

SECOND-CLASS HONOURS.—5. Cameron Mackay, Sutherlandshire; 6. A. Mutch, M.A., Tillicoultry; 7. James L. Buchanan, B.A., County Down.

SENIOR HEBREW CLASS.

FIRST-CLASS HONOURS.—1. Andrew Tweedie, M.A., Berwickshire (*Medallist*); 2. Walter Henderson, M.A., Edinburgh; 3. Sydney Smith, M.A., Edinburgh; 4. Thomas W. Wilson, M.A., Scone.

SECOND-CLASS HONOURS.—5. John Henderson, M.A., Morebattle; 6. H. M. Lamont, M.A., Edinburgh; 7. George Drummond, M.A., Oban, and Saville Middlemass, M.A., Edinburgh—equal; 9. George White, M.A., Edinburgh; 10. William Lindsay Gordon, M.A., Glenbervie.

SENIOR ARABIC CLASS.

PRIZEMAN.—Andrew Tweedie, M.A., Berwickshire.

JUNIOR SYRIAC CLASS.

PRIZEMAN.—Andrew Tweedie, M.A., Berwickshire.

ARCHD. R. S. KENNEDY, D.D., *Professor.*

Graduation in Divinity.

—o—

A.—NEW REGULATIONS FOR GRADUATION IN DIVINITY (APPLICABLE TO ALL WHO ENTER THEIR ACADEMIC COURSE AFTER 1ST OCTOBER 1895).

(For those who began the study of Divinity with a view to Graduation before 1st October 1895. See Regulations B, page 501.)

I. No one shall be admitted to examination as a Candidate for the Degree of Bachelor of Divinity (B.D.) in any University unless he be (1) a Graduate in Arts of that University, and have taken a complete Theological Course in a Scottish University or Universities, or in an institution or institutions specially recognised for the purpose by the University Court, or partly in a Scottish University or Universities and partly in such institution or institutions; or (2) a Graduate in Arts of any Scottish University or other University specially recognised as aforesaid, and have completed his Theological Course, of which not less than two years' attendance shall have been given in the University in which he presents himself for examination.

II. The examination shall in all cases be conducted at the seat of the University granting the degree, and the Examiners shall be the Professors of or Lecturers on the subjects included in the examinations, and two additional Examiners appointed by the University Court. The mode of conducting the examination shall be fixed from time to time by the Senatus Academicus.

III. The subjects of examination for the Degree of Bachelor of Divinity shall be arranged in two departments:—The First Department embracing—(1) Hebrew, and (2) Apologetic Theology, or the Evidences of Natural and Revealed Religion; and the Second Department embracing—(1) Ecclesiastical History, (2) Systematic Theology, and (3) Biblical Criticism and Biblical Antiquities.

IV. Every Student who at the time when these Regulations shall come into operation shall have completed a part of his Theological Course with a view to Graduation as Bachelor of Divinity in any Scottish University, under Regulations hitherto in force in that University, and shall thereafter complete his course of study in conformity with such Regulations, may become a Candidate for the Degree of Bachelor of Divinity without complying with the provisions of these Regulations.

V. The Degree of Bachelor of Divinity shall in no case be conferred on persons who have not complied with the conditions hereinbefore set forth, and shall not be conferred *honoris causâ tantum.*

VI. These Regulations shall come into force at the beginning of the first Academical year after the date on which it is approved by Her Majesty in Council.

Candidates are required to communicate their names, together with evidence of their being qualified in terms of the above Regulations, to the Dean of the Faculty of Divinity, at least one week before the day appointed for the Examination.

The subjects of examination for 1895-96 are as follows :—

DEPARTMENT I.

I. *Hebrew*—
- (1.) Questions in Grammar.
- (2.) Translation into Hebrew Prose.
- (3.) Isaiah, Chaps. xl.-liii.
- (4.) Psalms, Book i. (Psalms i.-xli.).
- (5.) Exodus i.-xx. (the unpointed text).

Candidates will be expected to show some knowledge of the history of the Times of Isaiah, and of the textual and historical criticism of the books prescribed.

II. *Apologetic Theology*—
- (1.) Modern Agnosticism.
- (2.) The Resurrection of Christ, and the Theories regarding it.
- (3.) St Paul and his writings in relation to Christian Apologetics.

DEPARTMENT II.

I. *Ecclesiastical History*—
- (1.) The Main Facts in the Development of the Constitution, Doctrine, and Worship of the Church from 100 to 451 A.D. (2.) The History of the Church in Scotland during the 16th Century.

II. *Systematic Theology*—
- (1.) The History of Theology in Scotland.
- (2.) Subjective Soteriology.
- (3.) The Bible Doctrines of Creation, Providence, and Man.

III. *Biblical Criticism and Biblical Antiquities*—

Manuscripts, Versions, and the more important Disputed Passages of the New Testament. (As in Scrivener's "Introduction.")

The History of Old Testament Introduction, and Professor Robertson's "Early Religion of Israel."

The Pastoral Epistles.

FEES.

Fee for Degree of B.D., ...	£5 5
When the Examination is taken at two periods—	
The Fee for the First is . . .	3 3
For the Second, ...	2 2

Candidates who fail to pass in one or more subjects pay a fee of 10s. 6d. for re-examination in each subject.

TIME-TABLE OF AND DATES OF ENTERING FOR EXAMINATIONS, 1895-96.[1]

1895.		
Oct. 15.	Tu.	Names to be entered and fees paid *on or before* this date.[1]
,, 22.	Tu.	Hebrew, 10 a.m. ; Apologetics, 2 p.m.
,, 23.	Wed.	Ecclesiastical History, 10 a.m. ; Divinity, 2 p.m.
,, 24.	Th.	Biblical Criticism, 10 a.m.
1896.		
Mar. 24.	Tu.	Names to be entered and fees paid *on or before* this date.[1]
,, 31.	Tu.	Hebrew, 10 a.m. ; Apologetics, 2 p.m.
April 1.	Wed.	Ecclesiastical History, 10 a.m. ; Divinity, 2 p.m.
,, 2.	Th.	Biblical Criticism, 10 a.m.

Every Candidate for Examination or for Graduation must matriculate for the Academic year in which they appear for Examination or for Graduation, and pay the Fee of £1 for Registration as a Member of the General Council (if not already a Member) *at least one clear day before the date of Graduation.*

The fees for Matriculation, for Examinations for Degrees, and for Registration of Graduates as Members of the General Council, are payable at the Matriculation Office, University. When Candidates cannot attend personally to pay the fees, they should transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed "*Union Bank of Scotland* (*Hunter Square Branch*), *Edinburgh*," and not by cheques on private accounts.

B.—OLD REGULATIONS FOR GRADUATION IN DIVINITY

(APPLICABLE TO ALL WHO BEGAN THE STUDY OF DIVINITY WITH A VIEW TO GRADUATION BEFORE 1ST OCTOBER 1895).

I. No one shall be admitted as a Candidate for the Degree of Bachelor of Divinity unless he be a Graduate in Arts of one of the Universities of Scotland, or of England, or of Ireland, or of a Colonial University, whose degrees shall, for this purpose, have been specially recognised by the University Court.

II. This Degree shall be conferred only after the Candidate has completed his Theological Curriculum with a view to the ministry in the Church or Denomination to which he belongs, and after he has passed a satisfactory examination in the various branches of Theology which are taught in this University.

[1] When names are not entered, nor fees paid, on or before the stated dates, an additional or late-entry fee of ten shillings must be paid before the Candidate can be admitted to examination. A Candidate is not held to be entered for the Examination until his name is entered, the fee paid, and all the necessary certificates, &c., lodged.

III. Candidates who are not Masters of Arts of the University of Edinburgh must have attended two classes in one or more of the Faculties of this University.

IV. The subjects of examination are the same as for the Degree of Bachelor of Divinity under the New Regulations.

V. Candidates who have completed their Theological Course may be examined in either of the departments, and may defer to some future occasion their examination in the other department, provided always that there be not a greater interval than two years between their two examinations.

VI. Students who have completed all the Sessions but one of their Theological Course may be admitted to examination in the first department.

VII. The examinations shall be conducted by the Professors of the Theological Faculty with the assistance of two Examiners, being Bachelors of Divinity of one of the Universities of Scotland, to be nominated by the University Court.

VIII. The Examination in the First Department shall take place at, or soon after, the commencement of the Theological Session; and the Examination in the Second Department at, or soon after, the close of the Theological Session—power being reserved to the Senatus Academicus, should they see cause, to appoint the examination in both departments to take place at either of these periods.

IX. The fee for examination for the Degree of B.D. for Candidates who began attendance on classes in the Faculty of Divinity before October 1894 is Three Guineas, payable in advance; but when the examination is taken at two periods a fee of Two Guineas is payable for the first, and One Guinea for the second examination.[1]

For those who began attendance on classes after 1st October 1894, the fee is £5, 5s.; but when the examination is taken at two periods, the fee for the first Examination is £3, 3s., and for the second, £2, 2s. Candidates who fail to pass in one or more subjects pay a fee of 10s. 6d. for re-examination in each subject.

Candidates are required to communicate their names, together with evidence of their being qualified in terms of the above Regulations, to the Dean of the Faculty of Divinity, at least one week before the day appointed for the Examination.

For subjects of examination, see page 500.

For Time-Table of and Dates of Entering for Examinations, 1895-96, see page 501.

[1] Every Candidate must matriculate before Examination or Graduation. He is also required before Graduation to pay the fee of £1 for Registration as a member of the General Council, which is compulsory by Act of Parliament.

Examination Papers.

DEPARTMENT I.

I. HEBREW.

Tuesday, 23rd October 1894.—10 *to* 1 *o'clock.*

I. Translate into Hebrew:—

And when much people were gathered together, and were come to him out of every city, he spake by a parable: A sower went out to sow his seed. And as he sowed, some fell by the wayside; and it was trodden down and the fowls of the air devoured it. And some fell upon a rock; and as soon as it was sprung up, it withered away because it lacked moisture. And some fell among thorns, and the thorns sprang up with it and choked it. And other fell on good ground, and sprang up and bare fruit an hundredfold. And when he had said these things, he cried, He that hath ears to hear, let him hear. And his disciples asked him, saying, What might this parable be?

II. (*a*) Point:—

1 ביום ההוא יהיה צמח יהוה לצבי ולכבוד ופרי הארץ לגאון ולתפארת
2 לפליטת ישראל: והיה ו הנשאר בציון והנותר בירושלם קדוש יאמר לו
3 כל הכתוב לחיים בירושלם: אם ו רחץ אדני את צאת בנות ציון
4 ואת דמי ירושלם ידיח מקרבה ברוח משפט וברוח בער: וברא יהוה
על כל מכון הר ציון ועל מקראה ענן ו יומם ועשן ונגה אש להבה
5 לילה כי על כל כבוד חפה: וסכה תהיה לצל יומם מחרב ולמחסה
ולמסתור מזרם וממטר:

(*b*) Translate.

(*c*) The LXX. read in verse 1, *τῇ δὲ ἡμέρᾳ ἐκείνῃ ἐπιλάμψει ὁ θεὸς ἐν βουλῇ μετὰ δόξης ἐπὶ τῆς γῆς* κ.τ.λ. Write the Hebrew corresponding to this rendering, and say whether, in your opinion, it is a different text, or simply a misreading or corruption of the one we have.

(*d*) Mention other divisions and the corresponding translations of the Hebrew text from כי על (v. 4) to the end of verse 5. What part of speech is חפה?

(*e*) What are the various views as to the apodosis of verse 3? Explain the construction of הנשאר (v. 2).

III. (*a*) Translate :—

1, 2 הוֹי מְשְׁכֵי הָעָוֹן בְּחַבְלֵי הַשָּׁוְא וְכַעֲבוֹת הָעֲגָלָה חַטָּאָה׃ הָאֹמְרִים יְמַהֵר

יָחִישָׁה מַעֲשֵׂהוּ לְמַעַן נִרְאֶה וְתִקְרַב וְתָבוֹאָה עֲצַת קְדוֹשׁ יִשְׂרָאֵל וְנֵדָעָה׃

3 הוֹי הָאֹמְרִים לָרַע טוֹב וְלַטּוֹב רָע שָׂמִים חֹשֶׁךְ לְאוֹר וְאוֹר לְחֹשֶׁךְ שָׂמִים

4 מַר לְמָתוֹק וּמָתוֹק לְמָר׃ הוֹי חֲכָמִים בְּעֵינֵיהֶם וְנֶגֶד פְּנֵיהֶם נְבוֹנִים׃

5, 6 הוֹי גִּבּוֹרִים לִשְׁתּוֹת יָיִן וְאַנְשֵׁי־חַיִל לִמְסֹךְ שֵׁכָר׃ מַצְדִּיקֵי רָשָׁע עֵקֶב שֹׁחַד

7 וְצִדְקַת צַדִּיקִים יָסִירוּ מִמֶּנּוּ׃ לָכֵן כְּאֹכֶל קַשׁ לְשׁוֹן אֵשׁ וְחֵשֶׁשׁ

לֶהָבָה יִרְפֶּה שָׁרְשָׁם כַּמָּק יִהְיֶה וּפִרְחָם כָּאָבָק יַעֲלֶה כִּי מָאֲסוּ אֶת תּוֹרַת

8 יְהוָה צְבָאוֹת וְאֶת אִמְרַת קְדוֹשׁ־יִשְׂרָאֵל נָאָצוּ׃ עַל־כֵּן חָרָה אַף־יְהוָה

בְּעַמּוֹ וַיֵּט יָדוֹ עָלָיו וַיַּכֵּהוּ וירגזו [וַיִּרְגְּזוּ] הֶהָרִים וַתְּהִי נִבְלָתָם כַּפּוּחָה בְּקֶרֶב

9 חֻצוֹת בְּכָל־זֹאת לֹא־שָׁב אַפּוֹ וְעוֹד יָדוֹ נְטוּיָה׃ וְנָשָׂא־נֵס לַגּוֹיִם מֵרָחוֹק

10 וְשָׁרַק לוֹ מִקְצֵה הָאָרֶץ וְהִנֵּה מְהֵרָה קַל יָבוֹא׃ אֵין־עָיֵף וְאֵין־כּוֹשֵׁל בּוֹ

11 לֹא יָנוּם וְלֹא יִישָׁן וְלֹא נִפְתַּח אֵזוֹר חֲלָצָיו וְלֹא נִתַּק שְׂרוֹךְ נְעָלָיו׃ אֲשֶׁר

חִצָּיו שְׁנוּנִים וְכָל־קַשְׁתֹתָיו דְּרֻכוֹת פַּרְסוֹת סוּסָיו כַּצַּר נֶחְשָׁבוּ וְגַלְגַּלָּיו

12 כַּסּוּפָה׃ שְׁאָגָה לוֹ כַּלָּבִיא וְשָׁאַג כַּכְּפִירִים וְיִנְהֹם וְיֹאחֵז טֶרֶף וַיְפַלֵּט

13 וְאֵין מַצִּיל׃ וְיִנְהֹם עָלָיו בַּיּוֹם הַהוּא כִּנְהַמַּת־יָם וְנִבַּט לָאָרֶץ וְהִנֵּה־חֹשֶׁךְ

צַר וָאוֹר חָשַׁךְ בְּעָרִיפֶיהָ׃

(*b*) Why do some read בעבות for כעבות (v. 1)? Give reasons grammatical and other for retaining the Massoretic reading.

(*c*) Remark on the form חטאה (v. 1). Give the sing. of נבונים (v. 4); parse it, and account for the pointing.

(*d*) Give the translations of the clause corresponding to the possible subjects of יחישה and ימהר (v. 2).

(*e*) Point out and remark on any striking grammatical peculiarity in verse 2. What idiom is exemplified in ונדעה?

(*f*) Explain the use of the definite article in בלביא (v. 12). Point out the other instances of this use in the passage.

(*g*) Whence comes the dagesh in לישתות (v. 5), קשתתיו (v. 11)?

(*h*) To what does ממנו (v. 6) refer? Does this require any correction in the text? Give the reason for your answer.

(*i*) Account for יסירו (v. 6) and ירפה (v. 7). Write out the constructions for which these are substituted.

(*j*) What is peculiar in the order of the words in the clause לכן־־־־־אש לשון אש (v. 7)? Is לשון אש a nominative or genitive, קש an accusative or genitive?

(*k*) Note two translations of the clause חשיש־־־־־־ירפה (v. 7), and explain the grammatical difference.

(*l*) What difference of opinion is there as to the rendering and reference of verse 8?

(*m*) Remark on נבלתם (v. 8), צר (v. 11), and parse חלציו (v. 10) and נבט (v. 13).

(*n*) How has the consonantal text of v. 9*a* been otherwise arranged and pointed? What is the ground alleged for this emendation?

(*o*) Point ושאג (v. 12), and write out and point the Qeri. Is there any difference in the meaning?

(*p*) What are the subjects of the verbs in 13*a*? Remark on the suffix in עריפיה. How may the word be otherwise pointed and translated?

IV. (*a*) Translate :—

1, 2 אָהַבְתִּי כִּי־יִשְׁמַע יְהוָה אֶת־קוֹלִי תַּחֲנוּנָי׃ כִּי־הִטָּה אָזְנוֹ לִי וּבְיָמַי
3 אֶקְרָא׃ אֲפָפוּנִי ו חֶבְלֵי־מָוֶת וּמְצָרֵי שְׁאוֹל מְצָאוּנִי צָרָה וְיָגוֹן אֶמְצָא׃
4, 5 וּבְשֵׁם־יְהוָה אֶקְרָא אָנָּה יְהוָה מַלְּטָה נַפְשִׁי׃ חַנּוּן יְהוָה וְצַדִּיק וֵאלֹהֵינוּ
6, 7 מְרַחֵם׃ שֹׁמֵר פְּתָאִים יְהוָה דַּלוֹתִי וְלִי יְהוֹשִׁיעַ׃ שׁוּבִי נַפְשִׁי לְמְנוּחָיְכִי
8 כִּי־יְהוָה גָּמַל עָלָיְכִי׃ כִּי חִלַּצְתָּ נַפְשִׁי מִמָּוֶת אֶת־עֵינִי מִן־דִּמְעָה אֶת־רַגְלִי
9, 10 מִדֶּחִי׃ אֶתְהַלֵּךְ לִפְנֵי יְהוָה בְּאַרְצוֹת הַחַיִּים׃ הֶאֱמַנְתִּי כִּי אֲדַבֵּר אֲנִי
11, 12 עָנִיתִי מְאֹד׃ אֲנִי אָמַרְתִּי בְחָפְזִי כָּל־הָאָדָם כֹּזֵב׃ מָה־אָשִׁיב לַיהוָה
כָּל־תַּגְמוּלוֹהִי עָלָי׃

(*b*) Mention the grounds on which it is said this Psalm is a late post-exilic composition.

(*c*) Give the rendering of verse 1 that supplies and alters nothing. Remark on it.

(*d*) Note the other ways of dealing with the difficulty.

(*e*) What are the principal explanations of the construction קולי תחנוני (v. 1)?

(*f*) What is peculiar in the construction of 2*b*? What emendation has been suggested for בימי? How may the necessity for this emendation be obviated?

(*g*) Write the absol. sing. of מצרי (v. 3). What emendation has been suggested?

(*h*) Remark on פתאים (v. 6), מנוחים (v. 7), כזב (v. 11), and תגמול (v. 12). Also parse this last word.

(*i*) Note and explain the peculiarity in יהושיע, and mention one or two similar forms.

(*j*) Remark on the suffixes יבי (v. 7) and והי (v. 12), and give the usual forms.

(*k*) Mention some of the principal renderings of verse 10.

V. (*a*) Translate :—

1, 2 בְּדַבֵּר אֶפְרַיִם רְחֵת נָשָׂא הוּא בְיִשְׂרָאֵל וַיֶּאְשַׁם בַּבַּעַל וַיָּמֹת : וְעַתָּה ו
יוֹסִפוּ לַחֲטֹא וַיַּעֲשׂוּ לָהֶם מַסֵּכָה מִכַּסְפָּם כִּתְבוּנָם עֲצַבִּים מַעֲשֵׂה חָרָשִׁים
3 כֻּלָּה לָהֶם הֵם אֹמְרִים זֹבְחֵי אָדָם עֲגָלִים יִשָּׁקוּן : לָכֵן יִהְיוּ כַּעֲנַן־בֹּקֶר
4 וְכַטַּל מַשְׁכִּים הֹלֵךְ כְּמֹץ יְסֹעֵר מִגֹּרֶן וּכְעָשָׁן מֵאֲרֻבָּה : וְאָנֹכִי יְהוָה אֱלֹהֶיךָ
5 מֵאֶרֶץ מִצְרָיִם וֵאלֹהִים זוּלָתִי לֹא תֵדָע וּמוֹשִׁיעַ אַיִן בִּלְתִּי : אֲנִי יְדַעְתִּיךָ
6 בַּמִּדְבָּר בְּאֶרֶץ תַּלְאוּבוֹת : כְּמִרְעִיתָם וַיִּשְׂבְּעוּ שָׂבְעוּ וַיָּרָם לִבָּם עַל־כֵּן
7, 8 שְׁכֵחוּנִי : וָאֱהִי לָהֶם כְּמוֹ־שָׁחַל כְּנָמֵר עַל־דֶּרֶךְ אָשׁוּר : אֶפְגְּשֵׁם כְּדֹב
שַׁכּוּל וְאֶקְרַע סְגוֹר לִבָּם וְאֹכְלֵם שָׁם כְּלָבִיא חַיַּת הַשָּׂדֶה תְּבַקְּעֵם :
9, 10 שִׁחֲתְךָ יִשְׂרָאֵל כִּי־בִי בְעֶזְרֶךָ : אֱהִי מַלְכְּךָ אֵפוֹא וְיוֹשִׁיעֲךָ בְּכָל־עָרֶיךָ
11 וְשֹׁפְטֶיךָ אֲשֶׁר אָמַרְתָּ תְּנָה־לִּי מֶלֶךְ וְשָׂרִים : אֶתֶּן־לְךָ מֶלֶךְ בְּאַפִּי וְאֶקַּח
בְּעֶבְרָתִי :

(*b*) Expand the first three words of verse 1 into a formally complete sentence, and write a note on **רחת**.

(*c*) Remark on this use of **נשא** (v. 1). Point it as another part of speech.

(*d*) Point out and account for the peculiarity of form in **כתבונם**. The LXX. has *κατ' εἰκόνα εἰδώλων*. What was their Hebrew reading?

(*e*) Write notes explanatory of the forms **כלה** (v. 2) and **חרש** (v. 2), and say what meanings have been assigned to **זבחי אדם** (v. 2).

(*f*) Parse **משכים** and give an account of its idiomatic use in Hebrew. Parse **יסער** and explain its syntactical relation. Why do we have **אַיִן** and not **אֵין** (v. 4)?

(*g*) Translate verse 5, reading **רעיתיך** instead of **ידעתיך**. Note the reasons for the emendation.

(*h*) Remark on כמרעיתם (v. 6), and explain the construction ויישבעו.

(*i*) Write grammatical and critical notes on ואהי (v. 7), and remark on דב שכול. Remark critically on אשור.

(*j*) What are the possible subjects of שחתך (v. 9) according to the Massoretic vocalisation? Can you suggest an emendation?

(*k*) וכל שריך וישפטוך. Point this emendation of verse 10, and translate the first half of the verse accordingly. What is to be said in support of the emendation?

Wednesday, 3rd April 1895.—10 *to* 1 *o'clock.*

A

I. (*a*) Point and translate:—

1 שיר למעלות אשא עיני אל ההרים
2 מאין יבוא עזרי: עזרי מעם יהוה עשה
3 שמים וארץ: אל יתן למוט רגלך אל ינום
4 שמרך: הנה לא ינום ולא יישן שמר
5 ישראל: יהוה שמרך יהוה צלך על יד
6 ימינך: יומם השמש לא יככה וירח
7 בלילה: יהוה ישמרך מכל רע ישמר
8 את נפשך: יהוה ישמר צאתך ובואך
מעתה ועד עולם:

(*b*) What is peculiar in the title above? Which of the rival views as to the meaning of "Songs of Degrees" receives considerable support from this Psalm? What is the view now generally adopted?

(*c*) Write short notes on each of the following points:—
(1) The A.V. rendering of v. 1*b*; (2) the first vowel in עזרי (v. 2); (3) the form למוט in v. 3; (4) the exact force of the negatives in vv. 3-4

II. (*a*) Translate :—

1 לְדָוִד מִזְמוֹר נְאֻם יְהוָה לַאדֹנִי שֵׁב לִימִינִי עַד־אָשִׁית
2 אֹיְבֶיךָ הֲדֹם לְרַגְלֶיךָ: מַטֵּה עֻזְּךָ יִשְׁלַח יְהוָה מִצִּיּוֹן רְדֵה
3 בְּקֶרֶב אֹיְבֶיךָ: עַמְּךָ נְדָבֹת בְּיוֹם חֵילֶךָ בְּהַדְרֵי־קֹדֶשׁ מֵרֶחֶם
4 מִשְׁחָר לְךָ טַל יַלְדֻתֶךָ: נִשְׁבַּע יְהוָה וְלֹא יִנָּחֵם אַתָּה־כֹהֵן
5 לְעוֹלָם עַל־דִּבְרָתִי כַּלְכִּי־צֶדֶק: אֲדֹנָי עַל־יְמִינְךָ מָחַץ בְּיוֹם־אַפּוֹ
6 מְלָכִים: יָדִין בַּגּוֹיִם מָלֵא גְוִיּוֹת מָחַץ רֹאשׁ עַל־אֶרֶץ רַבָּה:
7 מִנַּחַל בַּדֶּרֶךְ יִשְׁתֶּה עַל־כֵּן יָרִים רֹאשׁ:

(*b*) Explain the syntax of the imperative in v. 2, and of the perfect in v. 5. Also of נדבות, v. 3. Give alternative renderings of מלא, v. 6.

(*c*) Remark on the phrase נאם יי and its position in v. 1. Also on the form and meaning of על־דברתי (4). How does the LXX. render this phrase here, and in what other O.T. book is it found? What is the most probable derivation and meaning of כֹּהֵן?

(*d*) Write a critical and exegetical note on v. 3, taking account of (1) Jerome's rendering of בהדרי קדש, (2) the ἁπ. λεγ. משחר, and (3) the LXX. rendering: *ἐκ γαστρὸς ἀπὸ ἑωσφόρου ἐγγέννησά σε.*

(*e*) Indicate as concisely as you can (1) in what sense you consider this Psalm Messianic; and (2) the difficulties as to its date.

III. (*a*) Translate (omitting v. 2) :—

1 שִׁמְעוּ־זֹאת הַכֹּהֲנִים וְהַקְשִׁיבוּ בֵּית יִשְׂרָאֵל וּבֵית הַמֶּלֶךְ
הַאֲזִינוּ כִּי לָכֶם הַמִּשְׁפָּט כִּי־פַח הֱיִיתֶם לְמִצְפָּה וְרֶשֶׁת

2 פְּרוּשָׁה עַל־תָּבוֹר : וְשַׁחֲטָה שִׁטִּים הַעֲמִיקוּ וַאֲנִי מוּסָר
3 לְכֻלָּם : אֲנִי יָדַעְתִּי אֶפְרַיִם וְיִשְׂרָאֵל לֹא־נִכְחַד מִמֶּנִּי
4 כִּי עַתָּה הִזְנִיתָ אֶפְרַיִם נִטְמָא יִשְׂרָאֵל : לֹא יִתְּנוּ
מַעַלְלֵיהֶם לָשׁוּב אֶל־אֱלֹהֵיהֶם כִּי רוּחַ זְנוּנִים בְּקִרְבָּם
5 וְאֶת־יְהוָה לֹא יָדָעוּ : וְעָנָה גְאוֹן־יִשְׂרָאֵל בְּפָנָיו וְיִשְׂרָאֵל
6 וְאֶפְרַיִם יִכָּשְׁלוּ בַּעֲוֹנָם כָּשַׁל גַּם־יְהוּדָה עִמָּם : בְּצֹאנָם
וּבִבְקָרָם יֵלְכוּ לְבַקֵּשׁ אֶת־יְהוָה וְלֹא יִמְצָאוּ חָלַץ מֵהֶם :
7 בַּיהוָה בָּגָדוּ כִּי־בָנִים זָרִים יָלָדוּ עַתָּה יֹאכְלֵם חֹדֶשׁ אֶת־
חֶלְקֵיהֶם :

(*b*) What textual emendations are required in v. 2? Translate as emended.

(*c*) Give the etymology of מצפה and ישראל. What is anomalous in the plural of בית?

(*d*) Write an explanatory note on v. 7*b*. What is meant by גאון־ישראל (v. 5)?

IV. (*a*) Translate :—

1 וְעִמִּי תְלוּאִים לְמִשְׁוַבְּתִי וְאֶל־עַל יִקְרָאֻהוּ יַחַד לֹא יְרוֹמֵם :
2 אֵיךְ אֶתֶּנְךָ אֶפְרַיִם אֲמַגֶּנְךָ יִשְׂרָאֵל אֵיךְ אֶתֶּנְךָ כְּאַדְמָה
3 אָשִׂימְךָ כִּצְבֹאִים נֶהְפַּךְ עָלַי לִבִּי יַחַד נִכְמְרוּ נִחוּמָי : לֹא
אֶעֱשֶׂה חֲרוֹן אַפִּי לֹא אָשׁוּב לְשַׁחֵת אֶפְרַיִם כִּי אֵל אָנֹכִי
4 וְלֹא־אִישׁ בְּקִרְבְּךָ קָדוֹשׁ וְלֹא אָבוֹא בְּעִיר : אַחֲרֵי יְהוָה
5 יֵלְכוּ כְּאַרְיֵה יִשְׁאָג כִּי־הוּא יִשְׁאַג וְיָחֲרְדוּ בָנִים מִיָּם : יֶחֶרְדוּ
כְצִפּוֹר מִמִּצְרַיִם וּכְיוֹנָה מֵאֶרֶץ אַשּׁוּר וְהוֹשַׁבְתִּים עַל־בָּתֵּיהֶם
נְאֻם־יְהוָה :

(*b*) In R.V. verse 9 ends thus : "I will not enter into the city." Criticize this rendering.

(*c*) "Hosea, like the author of Deut. xxix. 23, derives his knowledge of the overthrow of the 'cities of the plain' from a tradition independent of that in Gen. xix." Explain this note of Canon Cheyne on v. 8.

(*d*) Indicate briefly some of the leading ideas emphasized in the book of Hosea.

B

I. Translation.

I. (*a*) Translate :—

1, 2 וְיָצָא חֹטֶר מִגֵּזַע יִשָׁי וְנֵצֶר מִשָּׁרָשָׁיו יִפְרֶה׃ וְנָחָה עָלָיו
רוּחַ יְהוָה רוּחַ חָכְמָה וּבִינָה רוּחַ עֵצָה וּגְבוּרָה רוּחַ דַּעַת
3 וְיִרְאַת יְהוָה׃ וְהֵרִיחוֹ בְּיִרְאַת יְהוָה וְלֹא־לְמַרְאֵה עֵינָיו
4 יִשְׁפּוֹט וְלֹא־לְמִשְׁמַע אָזְנָיו יוֹכִיחַ׃ וְשָׁפַט בְּצֶדֶק דַּלִּים
וְהוֹכִיחַ בְּמִישׁוֹר לְעַנְוֵי־אָרֶץ וְהִכָּה־אֶרֶץ בְּשֵׁבֶט פִּיו וּבְרוּחַ
5 שְׂפָתָיו יָמִית רָשָׁע׃ וְהָיָה צֶדֶק אֵזוֹר מָתְנָיו וְהָאֱמוּנָה אֵזוֹר
חֲלָצָיו׃

(*b*) Distinguish as to shade of meaning between : –
(1) חטר and נצר, in verse 1.
(2) חכמה and בינה
(3) עצה and גבורה } in verse 2.
(4) דלים and ענוי in verse 4.

(*c*) What change is proposed by Bickell and Cheyne on the beginning of verse 3?

(*d*) What do Lagarde and others suggest instead of והכה־ארץ in verse 4?

(*e*) Make a note on the repetition of אֱזוֹר of verse 5, and suggest a synonym after Lowth thereof for one clause.

II. (*a*) Translate :—

1 מַשָּׂא מוֹאָב כִּי בְלֵיל שֻׁדַּד עָר מוֹאָב נִדְמָה כִּי בְלֵיל
2 שֻׁדַּד קִיר־מוֹאָב נִדְמָה : עָלָה הַבַּיִת וְדִיבֹן הַבָּמוֹת לְבְכִי
עַל־נְבוֹ וְעַל מֵידְבָא מוֹאָב יְיֵלִיל בְּכָל־רֹאשָׁיו קָרְחָה כָּל־זָקָן
3 גְּרוּעָה : בְּחוּצֹתֶיהָ חָגְרוּ שָׂק עַל גַּגּוֹתֶיהָ וּבִרְחֹבֹתֶיהָ כֻּלָּהּ
4 יְיֵלִיל יֹרֵד בַּבֶּכִי : וַתִּזְעַק חֶשְׁבּוֹן וְאֶלְעָלֵה עַד־יַהַץ נִשְׁמַע
5 קוֹלָם עַל־כֵּן חֲלָצֵי מוֹאָב יָרִיעוּ נַפְשׁוֹ יָרִיעָה לוֹ : לִבִּי לְמוֹאָב
יִזְעַק בְּרִיחֶהָ עַד־צֹעַר עֶגְלַת שְׁלִשִׁיָּה כִּי מַעֲלֵה הַלּוּחִית
בִּבְכִי יַעֲלֶה־בּוֹ כִּי דֶרֶךְ חֹרֹנַיִם יָעִימוּ־שֶׁבֶר יְעֹעֵרוּ :

(*b*) Explain shortly the topographical allusions.

(*c*) Make observations on the grammatical forms :—
בְּלֵיל, verse 1 ; יְיֵלִיל, verses 2 and 3 ; יְעֹעֵרוּ, verse 5.

(*d*) Verse 2 ends with גרועה ; what is the reading of the parallel passage, Jeremiah xlviii. 37? Compare the two.

(*e*) Discuss critically the first half of verse 5, with special reference to the LXX., *ἡ καρδία τῆς Μωαβίτιδος βοᾷ ἐν αὐτῇ ἕως Σηγώρ· δάμαλις γάρ ἐστι τριετής*, and to "Eglath the third," which is the conjecture of Ewald and Dietrich.

II. Jewish History.

I. Give the date of the fall of Samaria, and narrate the circumstances immediately leading up to that event.

II. Discuss briefly the following statement of Wellhausen: "What distinguished Isaiah from Amos or Hosea was that his position was not like theirs apart from the government."

III. Explain shortly the following passage from Stanley: "The tendency to an Egyptian alliance, which had been denounced by Isaiah in the reign of Hezekiah, now [in the days of Josiah] seems to have been exchanged for an opposite policy."

III. Hebrew Prose.

I. In the eighth year of the king's reign there came a prophet to the people when they were all assembled, and addressed them in these terms: "Listen to me, O ye children of Israel. What can be the reason that you have despised Jahaweh and done so very wickedly in the sight of your God? Are you not all well aware that He has given you oil and wine in plenty, and multiplied your sons and daughters as the stars of heaven? But now, as Jahaweh liveth, you shall surely die, for He will be to you as a lion that teareth a heifer when there is no deliverer."

II. And it came to pass, as the angels were gone away from them into heaven, the shepherds said one to another: "Let us now go even unto Bethlehem and see this thing which is come to pass, which the Lord hath made known unto us." And they came with haste and found Mary and Joseph, and the Babe lying in the manger (אריה). And when they had seen it they made known abroad the saying which was told them concerning this child.

II. APOLOGETIC THEOLOGY.

Tuesday, 23rd October 1894.—2 *to* 5 *o'clock.*

Modern Agnosticism.

1. By what characteristics is Modern destinguished from Ancient Agnosticism? State generally what modern philosophies or theories you regard as agnostic, and indicate why.

2. Was Pascal an Agnostic? Argue the question, and state what you know as to discussion regarding it.

3. Give a summary of Herbert Spencer's exposition of the principles of Agnosticism, and examine it.

4. Is God knowable as an infinite and absolute Being and as a First Cause? Give epistemological reasons for your answer, and criticise the views of Kant, Hume, and Sir W. Hamilton.

The Resurrection of Christ and the Theories Regarding it.

1. Enumerate the different appearances of Christ after his Resurrection described or referred to in the New Testament.

2. Comment on the following statement:—"The question as to the nature and the reality of the Resurrection lies outside the sphere of historical inquiry. History must be content with the simple fact that, in the faith of the Disciples, the Resurrection of Jesus came to be regarded as a solid and unquestionable fact. What it requires as the necessary antecedent of all that is to follow, is not so much the fact of the Resurrection of Jesus as the belief that it was a fact."

3. State and examine the "Vision Hypothesis" of the Resurrection of Christ. Refer to the chief advocates of it.

4. Examine the objections to the historical actuality of the Resurrection of Christ founded upon (1) the alleged discrepancies of the Gospel narratives, (2) their date and motive, and (3) the rational or scientific incredibility of the event.

St Paul and his Writings in Relation to Christian Apologetics.

1. Mention some of the authors who have treated of St Paul and his writings from an apologetic point of view, and state in what way they have done so.

2. In what respects do Pfleiderer's views of the origin of St Paul's theology differ from those of Baur?

3. Summarise the testimony of Paul to the Resurrection of Christ so far as it is contained in the two Epistles to the Corinthians, and in the Epistles to the Romans and Galatians.

4. How is the relation of St Paul and his Writings to Christian Apologetics affected by the opposition to his apostolic authority in the primitive Christian community? Discuss this question referring to Baur's views of Paul's relation to the other Apostles, and to the special character of his Christianity.

Wednesday, 3rd April 1895.—2 *to* 5 *o'clock.*

Modern Agnosticism.

1. Define Agnosticism and compare it with somewhat similar philosophical positions. Indicate some of the more prevalent misconceptions as to its nature.

2. Name any six leading Modern Agnostics, and give an account of the distinct methods of argument which they have employed.

3. Describe the principal varieties of Religious Agnosticism.

4. How may the non-phenomenal existence, the self-consciousness, and the freedom of the soul be proved against the common agnostic philosophy?

The Resurrection of Christ, and the Theories Regarding it.

1. Enumerate, in what you regard as the order of their occurrence, the various appearances of Christ after the Resurrection, noticed by the four Evangelists and St Paul.

2. Keim says—"The Resurrection of Jesus is one of the best attested incidents in the New Testament; the details, however, swarm with contradictions and myth, and are the worst attested of any in all the sources." Explain and examine this statement.

3. Describe generally in what ways it has been attempted to invalidate the argument for the reality of the Resurrection drawn from the belief in it avowed by the New Testament writers.

4. Give an account of the historical evidences for the resurrection of Christ, arranging them in what you consider the order of greatest conclusiveness. How would you show the necessity for the resurrection as part of the scheme of salvation?

St Paul and his Writings in Relation to Christian Apologetics.

1. "Paul, with every means of becoming acquainted at first hand with the evidences of eye-witnesses, not only refused to credit them, but persecuted the Church of God. . . . Yet this strange man, because he has a vision one day, at once, and with equally headlong zeal, flies to the opposite pole of opinion." Examine the above, and show the importance for Christian Apologetics of the conversion of St Paul.

2. Give a general view and critical estimate of the attempts to explain naturally the conversion of St Paul.

3. Indicate to what extent you regard the theology of Paul as dependent on the historical tradition about Jesus.

4. What is the nature of the apologetic argument for Christianity which St Paul himself presents in the Epistle to the Romans? What has he to say as to the evidences and insufficiency of Natural Religion?

DEPARTMENT II.

I. ECCLESIASTICAL HISTORY.

Wednesday, 24th October 1894.—10 *to* 1 *o'clock.*

1. "The most important and also the most difficult phenomenon of our period in the department of Church organisation is the rise and development of the Episcopate." Criticise and illustrate this state-

ment by reference to the literary evidence available, and the chief theories held.

2. Point out the historical influences which favoured the ascendancy of the Roman See, and trace the steps in the assertion and establishment of the Roman Primacy.

3. Indicate the occasion and character of the chief Schisms of this period, and consider their influence in developing the idea and constitution of the Catholic Church.

4. Show how the formulation of catholic doctrine was occasioned and determined by particular heresies. What were the principal sources of heresy, and what were the criteria of orthodox doctrine accepted by the Church?

5. State distinctly, under reference to sources, the positions maintained by Arius, how they were criticised by Athanasius, and how the Council of Nicæa formulated its dogma. Trace the history of the term *ὁμοούσιος*, and criticise its validity.

6. What were the distinctive views of the Homoiousians, the Homoians, the Anomoians, and the Pneumatomachoi, and how were they disposed of? Give some account of the origin and validity of the so-called Nicæno-constantinopolitan Symbol.

7. Trace the course of the Nestorian Controversy. State and discuss the points at issue in the controversy between Nestorius and Cyrill.

8. Give an account of the Council of Chalcedon. What christological heresy did it condemn, and what dogma did it establish? Explain the meaning and reference of the following clause: *οὐδαμοῦ τῆς τῶν φύσεων διαφορᾶς ἀνῃρημένης διὰ τὴν ἕνωσιν, σωζομένης δὲ μᾶλλον τῆς ἰδιότητος ἑκατέρας φύσεως.*

9. Sketch briefly the antecedents, occasion and course, of the Pelagian Controversy, and contrast the positions of Pelagius and Augustine regarding Sin and Grace.

10. Describe the form of Christian Worship in the time of Trajan and at the close of this period, and account for the development of the liturgical elements.

11. Trace the progress of the Reformation movement in Scotland from the death of Wishart to the abolition of the Pope's jurisdiction. Point out any distinctive elements or features specially characteristic of the Scottish Reformation.

12. Give an account of the literary work of John Knox, and especially of his polemic against the Roman Church.

13. What views are held regarding the original constitution of the Reformed Church of Scotland? What circumstances led to the drawing up of the Second Book of Discipline, and what changes, if any, did it introduce? Give an outline of its ecclesiastical polity.

14. Write notes on—1, "The Cleansing of the Causeway"; 2, John Major; 3, The influence of the Lutheran reformation and doctrine in Scotland; 4, The relation of Wishart and Knox to the conspiracy against Cardinal Beaton; 5, The Act of James VI., 1592, ratifying the Liberty of the Kirk.

Thursday, 4th April 1895.—10 *to* 1 *o'clock.*

1. Show how, and with what varying fortunes, Christianity maintained and extended itself in the Roman Empire before it became a "religio licita."

2. Distinguish the influence of Platonism on the early Christian Church from that of Neo-Platonism. Illustrate from the history.

3. Name the Apostolic Fathers, the leading Apologists of the second and third centuries, and the Nicene Fathers. Give some idea of the literary labours of Jerome and Augustine.

4. Contrast the views of Marcion and of the Pseudo-Clement as to (1) the origin of the world, (2) the highest concept of God, (3) the Old Testament and the Apostles, and (4) the person of Christ. State any agreements between them.

5. What Schisms connected with questions of discipline originated immediately after the Decian and Diocletian persecutions? State the views of the Church and of the schismatics and the issue of the movements.

6. "The Diocesan Episcopate arose out of the needs of the Church in the second century." Illustrate or correct this statement.

7. Give an account of Monasticism from its origin to the beginning of the fifth century.

8. What efforts were made in the fourth century to reform the Church in the line of Pauline or Ultra-Pauline Theology? Account for their failure.

9. Describe the chief stages of the Arian controversy. Distinguish between the earlier and later use by the Nicene Fathers of the term *ὑπόστασις*. Account for *τρία πρόσωπα* being rarely used by them.

10. What views were held by the Church of the first four centuries as to the mode, the recipients, and the efficacy of Christian Baptism? Describe the preparation required of catechumens.

11. Write short notes on—
The First Scottish Covenant, and
The differences between the First and Second Books of Discipline.

12. State what you know of Cardinal Beaton, Alexander Alesius, Ninian Winzet (or Wingate), John Craig, and John Row.

13. Describe the conflict between Episcopacy and Presbytery in Scotland in the sixteenth century. Refer to the provisions of Act of Parliament 1592.

14. What legal measures were taken against Roman Catholics after the Reformation? What parts of the country adhered to the old faith?

II. SYSTEMATIC THEOLOGY.

Wednesday, 24th October 1894.—2 *to* 5 *o'clock.*

The History of Theology in Scotland.

1. What seem to have been the tenets of the Culdees and of the Lollards?

2. Give an historical and theological account of the Scottish Confession of 1560, and compare its dogmatic positions with those of the Westminster Confession.

3. Give an account of the "Marrow Controversy,"—its occasion, the doctrines at issue, its ecclesiastical incidents, and its historical influence.

4. Give some account of the chief features or peculiarities of the theology of Dr Thomas Chalmers as exhibited in his "Natural Theology," "Institutes of Theology," and "Prelections on Butler, Paley, and Hill."

Subjective Soteriology.

1. What subjects should be included in Soteriology? Arrange the topics of Subjective Soteriology in what you regard as the most natural order, and indicate your reasons for the order of arrangement adopted.

2. Give a summary of the teaching of St Paul as to (1) Grace, (2) Faith, (3) the Spirit of Sonship, and (4) Sanctification.

3. State and compare the Lutheran, Calvinian, and Arminian views as to the extent, efficacy, and application of Divine Grace.

4. Give an historical and critical account of the Doctrine of Assurance as presented in the Westminister Confession and of its position in the Reformed Theology generally.

The Bible Doctrines of Creation, Providence, and Man.

1. Examine the Biblical teaching as to the absoluteness, the mode, and the purpose of the Divine Creation, referring to the original terms, and compare it with the ideas of creation in the Hindu and Greek cosmogonies.

2. In what ways has it been attempted to explain the relation between God and the creature in the providential act of *preservation?* Which theory seems to you the most satisfactory? Give reasons for your answer.

3. Remark on the use of the leading psychological terms in the Old and New Testaments.

4. Is the doctrine of Personal Immortality taught in the Old Testament? Discuss this question and review the principal theories regarding it.

Thursday, 4th April 1895.—2 *to* 5 *o'clock.*

THE HISTORY OF THEOLOGY IN SCOTLAND.

1. Indicate what you regard as the general characteristics of Scottish Theology, and how far they seem to you due to historical causes.

2. Show the development of Scottish Theology between 1600 and 1750 on the questions of Predestination, the Atonement, and the true membership of the Church, arranging the chief writers according to their views.

3. What contributions to Apologetics do we owe to Thomas Halyburton and Principal Campbell? Give some idea of their arguments.

4. Trace the history in Scotland of the Doctrine of the Visible Church.

SUBJECTIVE SOTERIOLOGY.

1. Indicate the stages by which Subjective Soteriology has come to be recognised as a distinct department of Systematic Theology.

2. Is the Church doctrine as to the work of the Holy Spirit within us in Conversion consistent with our sense of ability, responsibility, and freedom as moral agents?

3. What are the chief elements in the teaching of the New Testament regarding Regeneration, and in the teaching of Paul regarding Faith?

4. What idea of Justification is held by those who include it wholly or in part under Subjective Soteriology? Remark on the teaching of the Roman Catholic Church and of Ritschl in this connection.

THE BIBLE DOCTRINES OF CREATION, PROVIDENCE, AND MAN.

1. State in a general way what you regard as the true relations between the Biblical doctrine of creation and the scientific theory of evolution.

2. What is the ground-thought of the Biblical doctrine of creation? Compare it with other theories as to the origin of the world. What answers may be given to the objections which have been urged to creation out of nothing and creation in time?

3. What is the Deistical view of God's relation to the world? What are its defects? Contrast it with the Biblical view.

4. "The original state of man according to Scripture seems to have been child-like innocence and not moral perfection." "By 'the image of God' is probably meant neither original righteousness nor dominion over the creatures, but personality (self-consciousness, self-determination, &c.)." Consider what may be said for or against these propositions.

III. BIBLICAL CRITICISM.

Thursday, 25th October 1894.—10 *to* 1 *o'clock.*

New Testament Textual Criticism.

1. Write notes explanatory of the characteristic principles and methods of textual criticism followed by Lachmann, Tregelles, Tischendorf, Westcott-Hort respectively.

2. Give as perfectly as you can the evidence for and against the Textus Receptus of John i. 18 (*μονογενὴς υἱός*).

3. Give the symbols, names, dates, and places where to be found of the uncial MSS. of the Apocalypse. Give the same particulars for the uncial MSS. of the Gospels belonging to the sixth century.

4. Mention and tell what you know of the versions commonly referred to the second or beginning of the third century.

5. Write out in English in full :—

ἡ σάρξ μου ἐστίν, ἣν ἐγὼ δώσω ὑπὲρ τῆς τοῦ κόσμου ζωῆς ΓΔΛΠ &c. (*hiat* A) ; f q Syrr (Pesh-Harcl-Hier) Memph. Goth. Arm. ; Clem-Alex *codd.* Orig. $^{2}/_{4}$ *al.*

ὑπὲρ τῆς τοῦ κόσμου ζωῆς, ἡ σάρξ μου ἐστίν ℵ ; m ; Tert. ; *Tr.*

ἡ σάρξ μου ἐστὶν ὑπὲρ τῆς τοῦ κόσμου ζωῆς BCDLT, 33 157 ; a b c e ff$_2$ Vulg. Syr-Cur. Theb. Aeth. ; Clem-Alex *cod.* Orig. $^{2}/_{4}$ Ath. Cyr-Alex. (*plures*) Cypr. ; *La. RV. Tr. We. WH.*

Pastoral Epistles.

6. State and comment upon objections to the Pauline authorship founded upon :—

(*a*) The use of unusual words, phrases, and modes of expression.

(*b*) The difficulty of finding a place for the historical references as to the journeys and occupation of the author and his friends.

(*c*) The peculiarity of the names and functions of the church officials.

Apocryphal Books.

7. Can you name any points of resemblance or contrast between the Old Testament Apocrypha and the New Testament Apocrypha?

8. Name and characterise the chief New Testament Apocryphal Gospels.

9. What is the character and what the historical value of the Acts of Paul and Thecla?

ROBERTSON'S "EARLY RELIGION OF ISRAEL."

10. (*a*) What was the origin of the Jahaveh religion? (*b*) Was Jahaveh a tribal god? In what sense, if in any? Examine Stade's theory.

11. Cite and examine the passages from Isaiah, Micah, Hosea, and Jeremiah, which are said to deny the divine authority of sacrifice.

12. Do we ever hear of Kings making laws? How does your answer bear on the Reuss-Kuenen theory?

13. Taking Wellhausen as representative of a school, show how he accounts for the transition of agricultural into religious feasts. Examine this in relation to the passover.

Friday, 5th April 1895.—10 *to* 1 *o'clock.*

I. HISTORY OF OLD TESTAMENT INTRODUCTION.

1. Discuss shortly the following statement of Reuss: "It was Roman Catholic scholars who first attained methods and results similar to those which now command acceptance under the title of Biblical Introduction."

2. Append brief notes to the following names: (*a*) Buxtorf; (*b*) Kennicott; (*c*) Eichhorn; (*d*) Samuel Davidson.

3. Trace the development of Introduction to the Pentateuch from Vatke to Kuenen in general terms, naming a few of the more important books of the period.

II. PROFESSOR ROBERTSON'S "EARLY RELIGION OF ISRAEL."

1. The following statement is quoted from Stade: "The pre-prophetic religion of Israel grew out of a blending of the Jahaveh religion with certai nelements of an older animistic or fetishistic religion found on the west of the Jordan."

Explain shortly what Stade means, state on what he bases his assertion, and show how Professor Robertson deals with it.

2. Sketch the critical theory in regard to the Three Codes, and discuss succinctly the question of their alleged divergence in regard to permission of various centres of worship.

3. "According to the modern theory the Biblical order of law and prophets is reversed into the order of prophets and law."

Comment shortly on this statement of Professor Robertson.

III. PASTORAL EPISTLES.

1. Εἰς τοῦτο γὰρ κοπιῶμεν καὶ ἀγωνιζόμεθα, ὅτι ἠλπίκαμεν ἐπὶ Θεῷ ζῶντι, ὅς ἐστὶ σωτὴρ πάντων ἀνθρώπων, μάλιστα πιστῶν (1 Timothy iv. 10. Revisers' Reading, 1881). For ἀγωνιζόμεθα some read ὀνειδιζόμεθα. Translate the passage.

Compare the two readings as to documentary evidence and otherwise.

Comment on the latter half of the verse from ὅς onwards.

2. Give an *outline* of the Patristic testimony to the Pastoral Epistles to A.D. 200.

3. Numerous words and phrases occur seldom or never in the New Testament except in the Pastoral Epistles. Give five instances, mentioning the connection of two of these cases. State generally the bearing of this fact on the authorship and date of these Epistles.

4. Write brief notes to the following phrases :—

(*a*) *ἡ γὰρ σωματικὴ γυμνασία πρὸς ὀλίγον ἐστὶν ὠφέλιμος.*

(*b*) *πιστὸς ὁ λόγος καὶ πάσης ἀποδοχῆς ἄξιος.*

(*c*) *ὁ μέντοι στερεὸς θεμέλιος τοῦ Θεοῦ ἕστηκεν.*

IV. OLD AND NEW TESTAMENT APOCRYPHA.

1. Give an outline of the History of Opinion respecting the Canonical Authority of the Old Testament Apocrypha.

2. Give a Summary of the Book of Wisdom, and indicate resemblances to its teaching to be found in the New Testament Scriptures.

3. Give a sketch of the career of Judas Maccabæus.

4. Classify the New Testament Apocrypha, and enumerate the Apocryphal Gospels.

5. What was the Arabic Gospel of the Infancy? What use was made of its contents in later times?

6. Give an outline of the Acts of Paul and Thekla, noticing any traces of Roman doctrine that are to be found in the book.

V. TEXTUAL CRITICISM OF THE NEW TESTAMENT.

1. In Matt. xxii. 40, for the reading *ἐν ταύταις ταῖς δυσὶν ἐντολαῖς ὅλος ὁ νόμος κρέμαται καὶ οἱ προφῆται* Alford gives as authorities : B D L Z ℵ 33 latt. Syr. Syr.-Cu. Æth. Orig. Tert. Hil. Cypr. What are these authorities?

2. Discuss the readings of 1 Tim. iii. 16 : *Θεὸς ἐφανερώθη ἐν σαρκί.*

3. What versions belong to the fourth century?

THE DEGREE OF BACHELOR OF DIVINITY.

1st August 1894.

Ian Roderick Fraser, M.A.

17th April 1895.

Thomas Grahame Bailey, M.A.
Archibald Duncan Livingstone, M.A.
William Meston, M.A.
William Joseph Pennell, M.A.
William Smith, M.A.

DEGREE OF DOCTOR OF DIVINITY (D.D.).[1]

The Degree of Doctor of Divinity is conferred *honoris causâ tantum*.—and is granted in absence in special cases only. The Register of Doctors of Divinity begins in 1709, with the names of Edmund Calamy, Daniel Williams, and Joshua Oldfield. The names of Evans, Harris, and Isaac Watts follow in 1728. The Register now includes above 300 names.

The following is a list of those who have received the Degree of Doctor of Divinity in the years 1889-95 inclusively[2]:—

1889.

*Griffith John
*Professor Abraham Kuenen
Archibald Henry Sayce, M.A.
Norman M. L. Walker

1890.

David Douglas Bannerman
R. H. Lundie, M.A.
Canon J. H. Overton

1891.

Richard Glover.
Robert Hutton, M.A.
*John Gibson Paton.
D. W. Simon, M.A., Ph.D.

1892.

William Balfour
Cornelius Giffen
Newham Hall

1893.

Thomas Nicol, B.D.
Thomas B. W. Niven.
George Adam Smith.
James Wells, M.A.

1894.

William Hastie, M.A., B.D.
J. A. M'Clymont, M.A., B.D.
J. C. M'Phail.
William Muirhead.

17th April 1895.

Rev. Robert G. Balfour, Free New North Church, Edinburgh.
*Rev. Alexander Marshall, M.A., Scots Church, Melbourne, Australia.
Rev. Charles Moinet, M.A., St John's Wood Presbyterian Church, Kensington, London.
Rev. John Patrick, M.A., B.D., Greenside Church, Edinburgh.
Rev. J. Guinness Rogers, B.A., Clapham.
*Rev. David Sidey, Napier, Hawkes Bay, New Zealand.

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[1] Those to whom the Degree has been offered, if unable to be present at the Graduation Ceremonial immediately ensuing, may present themselves at any subsequent ceremonial, on giving at least a week's notice.

[2] The names of those who received the Degree, prior to 1859, will be found in the "Catalogue of the Graduates in the Faculties of Arts, Divinity, and Law of the University, since its foundation," published in 1858, and the names of those who received the Degree from 1859 to 1889, both years included, will be found in the List of Graduates, published in 1889.

* Conferred *in absentia.*

Bursaries, Scholarships, Fellowships, &c.

I.—BURSARIES.

A.—Presentation Bursaries.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	Years.	Annual Allowance to each Bursar.	Patrons.
I.	1703	Agnes Nairne.	£3 0 0	1	1	..	Senatus Academicus.
II.	1715 1764	Sir James M'Lurg of Vogrie, sometime Dean of Guild of Edinburgh; and Rev. John Penman, Minister of Bothkennar.	16 6 8	1	4	£16 6 8	Capt. R. G. G. Gilmour of Craigmillar, 1st and 3rd Presentations. The Dean of Guild of Edinburgh, 2nd Presentation. Heirs of William Brown, surgeon, 4th Presentation.
III.	1766	Rev. Robert Alexander, Minister of Girvan.	About 19 0 0	1	4	About 19 0 0	Kirk-Session of Girvan and Presbytery of Ayr.
IV.	1838	Robert Blair, D.D., Barton St Andrews, Norfolk	14 8 0	1	4	14 8 0	Governors of George Heriot's Trust.
V.	1838	Do. Do.	About 23 0 0	1	4	About 23 0 0	The Principal, and Profs. of Hebrew, Divinity, Church History.

I. In abeyance at present.

II. The *M'Lurg and Penman Bursary* is tenable for four years at the Theological Classes. No person shall be presented to the Bursary who is not a Master of Arts of a Scottish University.

III. This Bursary consists of the interest of £420, lent on heritable security, and of £75, 17s. of accumulated interest. It must be held by a Student from the parish of Girvan, presented by the Session; whom failing, by one within the Presbytery of Ayr, to be appointed by the Presbytery. *Vacant.*

IV. The *Blair Bursary* can be held only by a young man who has been brought up in George Heriot's Hospital, and has become a Student of Divinity in the University of Edinburgh. The amount depends on the rate of dividend payable on the stock in which the foundation money is invested. *Bursar*—Vacant.

V. To be applied for the benefit of a Student of Divinity, whether a graduate or not. *Bursar*—1892, *Alex. R. Howell, M.A.*

B.—Competition Bursaries.[1]

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1646	Buchanan of that Ilk.	£20 16 8	1	3	£20 16 8	Town Council.
II.	1666	William Struthers &	}				
	1685	Archbishop Leighton.	21 7 9	1	3	21 7 9	Do.
III.	1687	Andrew Ramsay and Sir Andw. Ramsay of Abbotshall.	16 13 4	1	3	16 13 4	Do.
IV.	1695	King William III.	50 0 0	2	2	25 0 0	Senatus Academicus.
V.	1867	Miss Mary Ettles of Inverness.	110 9 3	3	3	About 35 0 0	Senatus.
VI.	1873	Grierson of Ogscastle's Trustees.	80 0 0	3	1	26 13 4	Senatus.
VII.	1878	Mrs Isabella Webster.	150 0 0	2	3	About 50 0 0	Senatus.
				1	3	33 7 4	
VIII.	1878	Dr Andrew Thomson	100 0 0	4	4	25 0 0	Trus. of Dr Thomson.
IX.	1879	Mrs Barbara Mylne	30 0 0	1	3	30 0 0	Moderator, Procurator, and Principal Clerk of General Assembly.
X.	1838	J. Stewart Hepburn of Colquhalzie, Esq.	13 2 6	1	3	13 2 6	Committee of the Presbytery of Edin.
XI.	1858	Do. Do.	13 2 6	1	3	13 2 6	Do.
XII.	1864	Do. Do.	13 2 6	1	3	13 2 6	Do.
XIII.	1882	William Renton.	19 17 8	1	3	About 19 17 8	Profs. of Theology.
XIV.	1884	Robert Hunter.	33 15 0	2	2	16 17 6	Principal and Profs
XV.	1889	James Simson, Edinburgh.	175 0 0	7	3	25 0 0	Presbytery of Edinburgh.
XVI.	1892	Thomas Lockerby, London.	About 32 0 0	1	3	About 32 0 0	Senatus.
XVII.	1896	John Sharp, Esq., Perth.	18 0 0	1	4	18 0 0	The Presbytery of Perth.

I. The Buchanan Bursary is open for competition to all Masters of Arts of any of the Universities of Scotland, or to Students who have passed the necessary Examinations for the Degree of M.A., but have deferred their Graduation with a view to Honours, and who are entering on their first or second Session in the Faculty of Divinity in the University of Edinburgh. No person is admissible to competition who has for more than one Session been a Student in the Faculty of Divinity in any of the Scottish Universities. The Bursar holds the Bursary for three years, subject to this condition, that he shall, during that period, give regular attendance, as a Student of Theology, in the University. If it appears to the Senatus Academicus desirable, for the purpose of distributing the benefits of competitive Bursaries in Theology among Students of different years, it is lawful, for that purpose only, to appoint a Student for a shorter period. No person can hold the Bursary along with any other Bursary, Fellowship, or Scholarship in any Scottish University. *Bursars*—Vacant.

[1] The values of these Bursaries are subject to deduction of the fees paid to the Examiners.

II. The Struthers and Leighton Bursary is open by competition to all Students who are Masters of Arts, or who have passed all the examinations necessary for admitting them to the degree of Master of Arts, and who are entering on their first session of attendance in the Faculty of Divinity in the said University.

III. By Ordinance, No. 81, of the Univ. Com., and subsequent Order in Council, the regulations for this Bursary are the same as those for the Buchanan Bursary. *Bursar*—1893, *Donald Munro, M.A.*

IV. By Ordinance, No. 76, of the Universities' Commissioners, and subsequent Order in Council, each King William Bursary is open to competition to all Masters of Arts of any of the Universities of Scotland, or Students who have passed the necessary examinations for the Degree of M.A., and who have attended for one Session, and no more, in the Faculty of Divinity in the University of Edinburgh: Provided that no person shall be a competitor who has attended for one or more Sessions in the Faculty of Divinity in any other of the Scottish Universities. The examinations in the competition shall be conducted by the Professors in the Faculty of Divinity in the University. Each Bursar shall hold his Bursary for two years, subject to the condition that he shall, during that period, give regular attendance as a Student of Theology in the University. No person shall hold either of the Bursaries along with any other Bursary, Fellowship, or Scholarship of any Scottish University. When the two Bursaries fall vacant at one time, one Bursar shall be appointed for two years, and the other for one year. *Bursar*—1894, *W. L. Gordon, M.A.; Walter Lamb, M.A.* (one year).

V. Founded in memory of her brother, J. Ettles, Esq., of Havannah. Open to those who have passed all the examinations for M.A., and are in the first year of their theological course. Cannot be held with any other Bursaries or Scholarships. *See* Deed of Foundation in CALENDAR for 1867-68. *Bursars*—1892, *W. J. Pennell, M.A.* 1893, *Frederick Hendry, M.A.* 1894, *W. W. Reid, M.A.*

VI. As in the case of the Faculty of Arts (see No. XLVII.), a student from the parishes of Crawford or Leadhills, is, if found duly qualified in respect of attainments, appointed to a Bursary in his first year, and holds it (unless he has failed to show himself a diligent student) to the end of his Theological curriculum. Failing any student from those favoured parishes, the Bursary or Bursaries will be thrown open to competition, but the winner only holds his Bursary for one year in each case. In the second and third years a student from Crawford or Leadhills has again a preference, but holds the Bursary for one year only. *See* p. 372 of CALENDAR, 1877-78. *Bursars*, 1893—First year, *Donald Duncan, M.A.*; second year, *George Drummond, M.A.*; third year, *T. S. Macpherson, M.A.*

VII. Founded by Mrs Isabella Webster, 38 Heriot Row, Edinburgh, in memory of her husband, George Webster, Esq. There are three Bursaries,—two of about £43 each, and one of £37, 10s., open to Students of Divinity in connection with the Church of Scotland in their first year, who have successfully passed all their Examinations for the degree of M.A. in any Scottish university, whether they have actually graduated or not. Each is tenable for three years. *See*

Deed of Foundation in CALENDAR for 1878-79, p. 377. *Bursars*—1892, *J. G. Bailey, M.A.* 1893, *Thomas W. Wilson, M.A.* 1894, *James Wallace, M.A.*

VIII. For the *Thomson Bursaries* application may be made to Messrs Traquair, Dickson & Maclaren, 11 Hill Street. Candidates of the name of Thomson or Traquair, or natives of the town or county of Dumfries, or of the city of Edinburgh, preferred. The subjects of Examination are Latin and Classical Greek, Mathematics and Natural Philosophy, Mental Philosophy (including Logic) and Moral Philosophy and Elementary Hebrew, Apologetics, and Greek Testament *See* p. 374 of CALENDAR for 1880-81. *Bursars*—1891, *John M'William, M.A.* 1892, *Charles Edward Stuart.* 1893, *Sydney Smith, M.A.* 1894, *Murray Corson, M.A.*

IX. *Mylne Bursary.*—Founded by Mrs Barbara Macaulay or Mylne, in memory of her husband, the Rev. Andrew Mylne, minister of the parish of Dollar. The Bursary (being the free proceeds of £750) which is for behoof of Students for the ministry of the Church of Scotland, of Scottish birth, tenable during the curriculum in Divinity, is awarded at the end of the session, after examination (of first year's students) on the subjects taught in the Theological Classes during the session. No one may become a Candidate who has not given his whole time to study during the session preceding the date of Examination, nor may the holder engage in paid work during any session in which he holds the Bursary. It cannot be held along with any other Bursary, Scholarship, or Endowment. *See* Deed of Foundation at page 377 of CALENDAR for 1880-81—Vacant.

X., XI., and XII. The sums attached to these Bursaries are payable to Divinity Students of the Church of Scotland of the first or second year towards the expense of their education at the University of Edinburgh. Each is tenable for three years. For one bursary Gaelic-speaking students have a preference.

XIII. Founded by the late William Renton, of 20 Royal Terrace, Edinburgh. The Faculty of Theology are the Patrons and Trustees. The Bursary may be held for three years, if the Bursar continues so long to prosecute his studies in Theology at the University of Edinburgh, with a view to the ministry in the Church of Scotland, and if not, then for the whole period he continues at the same. The student presented must have attained the age of sixteen, and not exceed the age of twenty-one years, and must be appointed after an examination in the month of November on such subjects as the Professors of the Faculty of Theology consider proper. *Bursar*—1893, *Walter R. Henderson, M.A.*

XIV. Founded by the late Robert Hunter, Dalhousie, Chesters; the Principal and Professors being Patrons. These Bursaries are for the benefit of Students of the Church of Scotland, and are awarded at close of first Session in Divinity, and are tenable for two years. Bursars must attend two Sessions in Chemistry and Geology, taking at least one of these Classes each Session. Students of the name of Hunter and Hamilton from the parishes of Temple or Cockpen have a preference, but preferential Candidates must attain to a fixed percentage. Bursars must produce certificates of diligence in the Classes of Chemistry and

Geology. See excerpt from Deed of Foundation, page 437 of CALENDAR for 1885-86. *Bursar*—1894, *Henry M. Lamont, M.A.*

XV. These Bursaries are open to Students who are entering on their first Session in Divinity, and are tenable for three years. For further details and subjects of examination (which differ somewhat from the University Examination for first year's Bursaries), apply to the Rev. Dr Langwill, Currie, or to the Rev. John Patrick, Greenside, Edinburgh. *Bursars* — 1893, *John Henderson, M.A.; Thomas Duncan, M.A.; George White, M.A.* 1894, *J. L. Buchanan; J. R. Murdoch; Andrew Mutch.*

XVI. Founded by the late Thomas Lockerby, Esq., London. The Bursary is tenable for three years, and is open to "Students who desire to become ministers of the Church of Scotland only." *See* Excerpt from Disposition, page 545 of CALENDAR for 1890-91. *Bursar*—1892, *D. G. Hamilton, M.A.*

XVII. *Sharp Bursary.*—This Bursary is of the annual value of £18, tenable for four years. The Bursar must be a Student of Divinity of the Church of Scotland, and may prosecute his studies at any one of the Scottish Universities. Preference to any student being a native of or subject to the jurisdiction of the Presbytery of Perth. Apply to the Patrons.

C.—PRESENTATION BURSARIES, Open only to Graduates or Students who have passed the necessary Examinations for the Degree of M.A., but have deferred their Graduation with a view to Honours.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1695	Robert Bayne of Pitcairley.	£25 0 0	1	3	£25 0 0	Society of Sons of the Clergy.
II.	1695	James Nairne.	16 13 4	1	3	16 13 4	Prof. of Divinity.

I. This formerly belonged to Ferguson of Raith, and was sold by him to the late Principal Lee; and by Principal Lee's representatives to Professor Crawford; and by Professor Crawford's representatives to the Society for the Sons of the Clergy. By Ordinance, No. 71, of the Universities' Commissioners, and subsequent Order in Council, the following are the regulations as to this Bursary:—Each Bursar shall hold the Bursary for three years, subject to the condition that he shall, during that period, give regular attendance as a Student in Theology in the University of Edinburgh. No person shall hold the Bursary along with any other Bursary, or with any Scholarship in the University. *Bursar*—Vacant.

II. This Bursary is tenable for three years, or for such period as the Bursar shall give regular attendance as a Student of Theology in the University of Edinburgh. *See* Ordinance, No. 67, of the Universities' Commissioners, and subsequent Order in Council. *Bursar—W. Landale.*

D.—BURSARIES gained in Faculty of Arts, the holders of which are at liberty to study in the Faculty of Divinity.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1809	Dr Donald Grant, London.	£180 0 0 About	2	4	£90 0 0 About	Dr Grant's Trustees.
II.	1846	John Jamieson, Edinburgh.	26 0 0 About	1	4	26 0 0 About	Principal and two Professors.
III.	1871	The Sibbald Trustees.	150 0 0	5	3	30 0 0	The Trustees of Dr J. R. Sibbald.
IV.	1889	Daniel Maclaurin, London.	70 0 0	1	4	70 0 0	Town Council.

I. *See* under Faculty of Arts.
II. *See* under Faculty of Arts.
III. *See* under Bursaries in Arts.
IV. *See* under Faculty of Arts.

II.—PRIZES.

I.—BARTY MEMORIAL PRIZE.

The Barty Memorial Prize of £20 for scholarship in Hebrew and Hellenistic Greek is open to entrants to the Divinity Halls of the four Scottish Universities.

II.—HEPBURN PRIZE.

The Hepburn Prize of £25 (which may be divided), open to all Students in actual attendance at the Divinity Hall, may be awarded annually for an essay on a prescribed subject.

1894. *Sydney Smith.*
,, *William Smith.*

III.-XII. THE GUNNING VICTORIA JUBILEE PRIZES.

With a view to promote the study of Natural Science among candidates for the ministry, and to bring out among ministers the fruits of study in Science, Philosophy, Language, Antiquity, and Sociology, Dr R. H. Gunning, of Edinburgh and Rio de Janeiro, has founded ten prizes in the Faculty of Divinity of the University of Edinburgh, to be known as "The Gunning Victoria Jubilee Prizes."

These prizes are ten in number, and comprise a series of five prizes of £50, £40, £30, £20, and £10, for excellence in Theological subjects, and a series of five prizes of similar values for excellence in Natural Science subjects. In their order the prizes in each series correspond in value. A minimum standard of proficiency will be required in each series. The successful competitors may each take both the prize in the Theological, and the prize in the Natural Science series to which their marks may respectively entitle them.

The prizes are competed for triennally at the close of the Divinity Session, and are open to all Students of the Church of Scotland, or other Scottish Churches holding the Confession of Faith, who are graduates of this University, or have attended two classes in the Faculty of Divinity in this University, and who have completed their Theological curriculum within two years of the close of the session when the competition takes place.

The examination in the Natural Science series will be on Natural History, Botany, and Geology, and of the same standard as the First B.Sc. Examination in Pure Science. The examination in the Theological series will be in Theology proper, the Language and Literature of the Old Testament, Ecclesiastical History, and Biblical Criticism.

The Examiners are the Professors of the subjects of examination in the University of Edinburgh; with the addition of a member of the Senatus of the New College, to be appointed by the Faculty of Divinity. See Revised Scheme, p. 519 of CALENDAR 1889-90.

The next examination under this scheme will be held at the close of Session 1895-96.

1893. *Theological Series*—1st Prize—D. M. Kay, B.D., B.Sc.
2nd ,, Adam W. Fergusson, B.D.
3rd ,, Alexander Grieve, M.A.
4th and 5th Prizes not awarded.

Natural Science Series—1st and 2nd Prizes not awarded.
3rd Prize—Adam W. Fergusson, B.D.
4th ,, Alexander Grieve, M.A.
5th ,, D. M. Kay, B.D., B.Sc.

III.—SCHOLARSHIPS.[1]

I.—PITT CLUB DIVINITY SCHOLARSHIP.

This Scholarship was instituted in 1862 by the Pitt Club, is of the annual value of £107, 11s. 2d. (under deduction of Examiners' fees), and is tenable for three years. By Ordinance No. 77, of the Universities' Commissioners, this Scholarship is open to competition to all Masters of Arts of any of the Universities of Scotland who have given

[1] The names of Scholars are retained in the Calendar for five years.
It has been agreed by the Senatus and the Faculty of Divinity, in regard to

regular attendance in the Faculty of Divinity in the University of Edinburgh for three complete Sessions, and who are in the course of studying, with the view of becoming Clergymen of the Church of Scotland. No person is admissible who has been entered as a Student of Divinity more than six years prior to the time of the competition.

Candidates are examined on (1) The Evidences of Revealed Religion; (2) Systematic Theology; (3) Hebrew; (4) Church History; (5) Biblical Criticism. It cannot be held with any other Scholarship, Fellowship, or Bursary of any Scottish University, or along with any parochial or pastoral charge, whether as minister or assistant.

1890. Alex. S. Martin, M.A.
1893. *David M. Kay, B.Sc., B.D.*

II.—MAXTON DIVINITY SCHOLARSHIP.

This Scholarship was founded by the Trustees of the late John Maxton, Esq., in 1867, is of the annual value of £42, 8s. (under deduction of Examiners' fees), and is tenable for three years. It is open only to Students who are members of the Established Church of Scotland, and who have completed the course of study in the Faculty of Divinity in the University of Edinburgh. *See* Deed of Foundation, at p. 234 of CALENDAR for 1867-68.

1890. John James Galloway, M.A.
1893. *Adam W. Fergusson, B.D.*

III.—THE GLOVER DIVINITY SCHOLARSHIP.

This Scholarship was founded in 1875 by Subscribers to a Fund for commemorating the memory of the Rev. W. Glover, D.D., and by the University Endowment Association. It is of the annual value of about £37, 18s. (under deduction of Examiners' fees), tenable for three years, and open to all Masters of Arts of any of the Universities of Scotland who have finished their study of Theology, before entering the Church of Scotland, within six years, and who have attended the last Session of their course at least in the University of Edinburgh. It cannot be held with any other Divinity Scholarship or Bursary in any Scottish University, and it is not offered for competition in any year where there is a vacancy in the Pitt Divinity Scholarship or the Maxton Divinity Scholarship. *See* Deed of Foundation, at p. 343 of CALENDAR for 1875-76.

1894. *Robert Venters, M.A., B.D.*

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the Fellowships and Scholarships of the funds of which they are severally the administrators, that

1. The *Pitt Theological Scholarship* shall be competed for when it falls vacant.
2. The *Aitken Theological Scholarship* shall be reserved from competition when it falls vacant in the same year with the Pitt.
3. The *Glover Divinity Scholarship* shall (according to its conditions) not be open to competition when the Pitt or Maxton may be open, and shall be similarly reserved when the Aitken is open.
4. That meanwhile the *Maxton* be competed for when it is vacant.

IV.—THE AITKEN THEOLOGICAL SCHOLARSHIP.

This Scholarship, founded in 1875 by bequest of the Rev. David Aitken, D.D., formerly minister of Minto, is of the annual value of £97, 1s. 8d. (under deduction of Examiners' fees). Its purpose is to make provision for the study of Church History and Biblical Criticism at one or more University Seats in Germany, or elsewhere on the Continent of Europe, in the case of meritorious students at Edinburgh University. It is to be awarded, after competitive examination (on due proficiency being shewn), to a Student in Divinity of the University of Edinburgh, who is a Graduate in Arts of that University of not more than four years' standing. It is tenable for two years; but the Senatus may extend the term for another year if it appear to them desirable. The time of the competition to be fixed and publicly intimated by the Senatus at least three months before; and the Senatus are also at liberty to prescribe whether one Semester or two Semesters in the foreign University shall be attended in each year. It is not offered for competition in the same year as the Pitt Divinity Scholarship or the Glover Divinity Scholarship. *See* Deed of Foundation at p. 344 of CALENDAR for 1876-77.

1892. J. J. Trotter, M.A.
1895. *William Smith, M.A.*

V.—THE DAVID KIDD DIVINITY SCHOLARSHIP.

This Scholarship, which is of the annual value of £34, 6s. 10d. (under deduction of Examiners' fees), is tenable for three years, and is awarded, after competitive examination in Theology (same as for B.D.), to students of any of the Universities of Scotland who are natives of Scotland, and who have finished their course of study with the view of becoming Ministers of the Church of Scotland. *See* Deed of Foundation in CALENDAR for 1879-80, p. 354.

1892. *David A. Rollo, B.D.*

VI.—VANS DUNLOP SCHOLARSHIP IN HEBREW AND ORIENTAL (SEMITIC) LANGUAGES.

The Competition is open to all Matriculated Students (*a*) who have regularly attended Classes in the University for not less than two and not more than seven years, (*b*) who have attended at least two courses under the Professor of Hebrew and Oriental Languages, and (*c*) who have not discontinued attendance at the University for more than one year.

Candidates will be examined in Hebrew, Syriac, and Arabic.

The Examiners are the Professor of Hebrew and Oriental Languages, and an Examiner to be appointed by the Senatus.

The conditions of tenure are the same as those applicable to the Vans

Dunlop Scholarships in Arts. The next competition will take place in March 1896.

1890. { James Thomson, M.A., / Charles H. Titterton, M.A. } equal.
1893. *William B. Stevenson, M.A.*

VII.—VANS DUNLOP SCHOLARSHIP IN HISTORY.

The competition is open to all Matriculated Students of not less than two, and not more than six, years' standing, who have attended one or more courses of Lectures either by the Professor of History or by the Professor of Ecclesiastical History, and who have not discontinued attendance at the University for more than one year. The Examiners are the Professor of History, the Professor of Ecclesiastical History, and either the Professor of Humanity or the Professor of Greek. The next Examination will be held in October 1895.

VIII.—BRUCE OF GRANGEHILL AND FALKLAND SCHOLARSHIPS.

These Scholarships were founded in 1865 by Mrs Tyndall Bruce of Falkland, and are of the annual value of £100. They come into operation only when a vacancy occurs in any one of the three Scholarships of this name in the Faculty of Arts, by the death, resignation, or dismissal, of a Scholar during the period of his tenure of the Scholarship; and are tenable in this Faculty during the remainder of that period. They cannot be held with any other Scholarship or Fellowship of a Scottish University, or with any situation yielding an income of £100 a year. The subjects of Examination are prescribed from time to time by the Faculty.

1891. David A. Rollo, M.A.
1893. *Thomas Marjoribanks, M.A.*
1894. *T. W. Wilson, M.A.*
W. J. Pennell, M.A.

IX. and X.—THE JEFFREY SCHOLARSHIPS.

These Scholarships, two in number, were founded in 1887 by Miss Jane Jeffrey of Victoria Terrace, Portobello. They are each of the annual value of about £73. 2s. 6d. (under deduction of Examiners' fees), and are tenable for one year. They are awarded annually for special proficiency in the subjects embraced in each of the four departments of Divinity, Hebrew and Semitic Languages, Ecclesiastical History, and Biblical Criticism; and are open to Students of Divinity in connection with the Church of Scotland who shall have given regular attendance for at least one Session on the Divinity Classes in this University, including the class with which the Scholarship competed for is specially connected. They are competed for in the following order:—first year, Divinity, and Hebrew and Oriental Languages; second year, Ecclesiastical History and Biblical

Criticism; and so on from year to year. The Examination at the close of Session 1895-96 is in Ecclesiastical History and Biblical Criticism. *See* Deed at page 497 of CALENDAR for 1888-89.

1891. *Divinity*—James M. Kirkpatrick, M.A.
Hebrew and Arabic—James N. Cuthbert, M.A.
1892. *Ecclesiastical History*—John Kennedy, M.A.
Biblical Criticism—S. J. Ramsay Sibbald, M.A.
1893. *Divinity*—William Knowles, M.A.
Semitic Languages—James Wedderspoon, M.A.
1894. *Ecclesiastical History*—L. Clarence D. Douglas and John Ritchie, M.A., equal.
Biblical Criticism—Thomas Marjoribanks, M.A., B.D., and William Smith, M.A., equal.
1895. *Divinity*—Thomas O. Duncan, M.A.
Semitic Languages—Andrew Tweedie, M.A.

XI.—COBB SCHOLARSHIP.

This Scholarship, founded in 1889, is a bequest by the late Miss Matilda Johnston Cobb, Broughty Ferry. It is of the annual value of £32, 10s. (under deduction of Examiners' fees), and is tenable for three years. The subjects of Examination are Hebrew, Greek, Latin, and Mathematics, and the Scholarship is open to competition amongst Students who are entering on the study of Divinity with a view to becoming Ministers of the Church of Scotland.

1890. John Hunter, M.A. | 1893. *Andrew Tweedie, M.A.*

XII.—THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is open to Graduates in any of the Faculties in the University who have obtained their Degrees after examination. For further particulars, see page 483.

SCHOLARSHIPS, BURSARIES, AND UNIVERSITY PRIZES,

OPEN FOR COMPETITION IN THE FACULTY OF DIVINITY DURING THE ACADEMIC YEAR COMMENCING 1ST OCTOBER 1895.[1] [2]

I.

Vans Dunlop Scholarship in History, No. XXX., page 354. The next competition will take place on the third Monday, Tuesday, and Wednesday of October 1895, beginning at 10 A.M. each day. Names to be entered *on or before* 28th September.

[1] *Note.*—None of the undernoted Bursaries or Scholarships can be held along with any other Bursary, Fellowship, or Scholarship in any Scottish University. None of the after-mentioned Prizes are subject to this condition.

[2] The values of the Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise or fall of the rate of interest, &c. For further information and for information regarding other Scholarships, Bursaries, and Prizes, &c., see pages 524 to 534.

The subjects prescribed are :—

(1.) "History of Great Britain from 1714 to 1820."
(2.) "History of Scotland from 1603 to 1746," both of these years being included.
(3.) "History of Rome from 88 B.C. to 14 A.D."
(4.) "History of France under Louis XIV."

II. Presentation Bursaries.

The Blair, No. IV., page 524.

III. Presentation Bursaries. Open only to Graduates or Students who have passed the necessary Examination for the Degree of M.A., but have deferred their Graduation with a view to Honours.

The Bayne, No. I., page 528.

IV. Competition Bursaries.

The Bursary Examination at the beginning of Session 1895-96 will be held on Friday, 8th, and Saturday, 9th November, commencing at 10 A.M. each day, when the following Bursaries will be open for competition :—

1. *One Webster Bursary*, No. VII., pages 525 and 526.
2. *One Ettles Bursary*, No. V., pages 525 and 526.
3. *One Thomson Bursary* may be vacant, No. VIII., pages 525 and 527.
4. *Buchanan Bursary*, No. I., page 525.
5. *One Lockerby Bursary*, No. XVI., pages 525 and 528.

The subjects of examination for the above, and for *any other ordinary competition Bursary for first year's Students that may be vacant* at the opening of the Session will be—

(1.) *Latin*—Tacitus' "Germania," and translation from English into Latin prose.
(2.) *Greek*—Sophocles' "Œdipus Colonoeus," and Demosthenes' "Philippic," III.
(3.) *Mathematics*—"Euclid," Books I.-VI.; Algebra and Elementary Trigonometry.
(4.) *Metaphysics*—Ferrier's "Lectures on Greek Philosophy."
(5.) *Moral Philosophy*—Sidgwick's "History of Ethics."
(6.) *Natural Philosophy*—Blaikie's "Elements of Dynamics," and Balfour Stewart's "Elementary Physics."
(7.) *Hebrew*—Davidson's Grammar and Exercises.
(8.) *Apologetics*—Flint's "Antitheistic Theories."
(9.) *Greek Testament*—Acts of the Apostles and Epistle to Ephesians.

6, 7, 8. *Grierson Bursaries*, No. VI., pages 525 and 526. Preferential candidates to lodge their applications with the *Clerk of Senatus* on or before 1st November 1895.

The subjects of examination for the Grierson Bursaries, if there be competition, will be :—

For the *first* year—
Same as for ordinary Competition Bursaries, except that *Hebrew*, *Apologetics*, and *Greek Testament* are omitted.

For the *second* year—
(1.) *Latin*—Lucretius, Book V., and Livy, Book II.
(2.) *Greek Testament*—Gospel of St Matthew, and Pastoral Epistles.
(3.) *Hebrew*—Grammar; Joshua, chapters i.-x. inclusive; Psalms i.-viii. inclusive; Hebrew Prose Composition.
(4.) *Divinity*—The Trinity; Doctrine of Sin.
(5.) *Ecclesiastical History*—To 325 A.D.
(6.) *Biblical Criticism*—Charteris' "Christian Scriptures."

For the *third* year—
(1.) *Apologetic Theology*—Butler's "Analogy."
(2.) *Hebrew*—Judges, Amos, Psalms, Book iii.
(3.) *Ecclesiastical History*—To 325 A.D., and of Scotland, 1500 A.D. to 1600 A.D.
(4.) *Biblical Criticism*—"Canonicity," pp. 1-23; 53-75.

9, 10. *Two Simson Bursaries*, No. XV., pages 525 and 528.

11, 12. *Two Hepburn Bursaries*, No. XI., pages 525 and 527. Subjects of Examination: *Butler's Analogy*, Part I., and *Lightfoot's Epistle to the Colossians*, with the dissertations, and Professor Stewart's text-book of *Christian Evidences*. For particulars apply to the Rev. Dr Scott, minister of St George's, Edinburgh, or Rev. Dr Langwill, Clerk of the Presbytery of Edinburgh. These Bursaries may be held by Students of Divinity holding other Bursaries not exceeding £25 in value.

13. *A Hepburn Prize*, £25 (which may be divided), for the best Essay on "Socialism," to be competed for by Students of second or subsequent year. The Essay not to exceed fifty pages 4to, and to be handed to Rev. Dr Scott, 16 Rothesay Place, Edinburgh, on or before 1st December 1895.

14. *Barty Memorial Prize*, of about £20, for Scholarship in Hebrew and Hellenistic Greek, is open to entrants to the Divinity Halls of the four Scottish Universities. Competitors to apply to J. W. Barty, Esq., Dunblane.

15. *Travelling Scholarship for Bible Lands, including Greece.*—This Scholarship, of the value of £150, will be open for competition in June 1896 to all Graduates in Arts who have in March or April 1895 or 1896 completed either their second or third Session of Study in the

Divinity Hall of any Scottish University, with a view to the ministry of the Church of Scotland. The holder will be required to leave before the end of September for the East, and to spend (1) not less than three months in Greece, devoting there the main part of his attention to the living language of the country; and (2) not less than six months in Syria and Egypt, devoting special attention to the study of Arabic during this period.

The subjects of examination will be (1) Classical and New Testament Greek; (2) Hebrew; (3) a prescribed portion of Early Church History; (4) some work or works on Bible Archæology and Egyptian History. The subjects of examination and other details will be intimated in the September number of the Church of Scotland *Mission Record* for 1895.

At the close of Session 1895-96, the following will be open for competition :—

1. *The Pitt Scholarship* No. I., page 530. Examination as for B.D.

2. *Vans Dunlop Scholarship in Hebrew and Oriental* (*Semitic*) *Languages*, No. XXIX., page 354. The competition will take place on *Tuesday*, 31*st March* 1896, and following days, beginning at 10 A.M. each day. Names to be given in *on or before* 13th March.

The following are the subjects of examination :—

(*a.*) *Hebrew.*—The First Book of Psalms, and the Books of Deuteronomy, Amos, and Micah—to be known critically. Hebrew prose composition.

(*b.*) *Syriac.*—Grammar. The First Three Parts (41 pages) of Nestle's Chrestomathy. The Second Gospel (Peshittâ Version). Translation into Syriac.

(*c.*) *Arabic.*—Socin's Grammar, Bruennow's Chrestomathy of Arabic Prose Pieces, pp. 1-22, and 45-55. The Kor'ân, Sûras iii. and xxviii.-xxx. inclusive. Translation into Arabic.

3, 4. *Two Jeffrey Scholarships*, No. IX., page 533.

The subjects for the Scholarship in Ecclesiastical History, are :—

1. The main facts in the Development of the Constitution, Doctrine, and Worship of the Church from 100 to 323 A.D.
2. The Conversion to Christianity in Britain and Germany.
3. History of the Church in Scotland from 1560 to 1690.

The subjects for the Scholarship in Biblical Criticism are :—

1. Robertson's "Early History of Religion."
2. Godet's "Introduction to New Testament." Vol. I. English Translation.
3. "Canonicity." Introductory Chapters, pp. i.-cxvi.

5, 6. *Two King William Bursaries*, No. IV., pages 525 and 526. The subjects of examination for this Bursary will be the work of the Session in the Classes of Divinity, Ecclesiastical History, Biblical Criticism, and Junior Hebrew.

7. *One Robert Hunter Bursary*, No. XIV., pages 525 and 527. The subjects of examination are the same as for the "King William Bursaries." These Bursaries cannot be held along with any other Bursary, Scholarship, or Fellowship in any Scottish University.

8. *The Mylne Bursary*, No. IX., pages 525 and 527. Examination as for "Robert Hunter" Bursary.

PRIZES.

1, 2. *The Gunning Victoria Jubilee Prizes*, No. III., page 529. The examination in the Natural Science Series will be on Natural History, Botany, and Geology, and will be of the same standard as the First B.Sc. Examination in Pure Science. The competition will take place as follows:—23rd March 1896, Botany at 1; 24th March, Natural History at 10; Geology at 1.

The examination in the Theological series will be:—

Hebrew—Joshua and Psalms, Book iii., to be known critically.

Divinity—Internal Evidences of Christianity, and the Doctrine of the Trinity.

Ecclesiastical History—The main facts in the Development of the Constitution, Doctrine, and Worship of the Church, from 150 to 323 A.D.

Biblical Criticism—Robertson's Early Religion of Israel; Canonicity, Introduction i.-cxx., and Text, pp. 1-41.

3. The *Lord Rector's Prize*, see No. II., page 361.

4. *Two Gray Prizes*, see No. VI., page 362.

William Dickson Travelling Fund, see page 358.

The attention of all Bursars in the Faculty of Divinity is particularly called to the following Regulation:—

"Each Bursar must present a Certificate, signed by the Dean, attesting his regular attendance on the proper Classes in the Faculty of Divinity on each occasion on which he applies to the Factor for a payment. Payments are made by the Factor for the University, Mr Henry Cook, W.S., 61 North Castle Street, Edinburgh, on and after 14th November for the Martinmas payments, and on and after 18th May for the Whitsunday payments,—between 10 and 3 o'clock.

N.B.—*Bursars, Scholars, and Fellows who desire to resign should at once announce this to the Factor. They must apply to the Factor for the instalments due to them within three months after they have become payable, otherwise they will be regarded as having resigned.*

M. C. TAYLOR, D.D.,
Dean of the Faculty of Divinity.

IV.

FACULTY OF LAW.

1895-96.

Dean.

PROFESSOR SIR LUDOVIC J. GRANT, BART., B.A.,

29 *India Street.*

Programme of Classes.

FACULTY OF LAW.

WINTER SESSION, 1895-96.

The Classes in the Faculty of Law will open on Tuesday, 15th October, and will close on Friday, 20th March 1896.

Classes.	Days of Opening, and Hours of Lectures.	Professors and Lecturers.	Class Fees.
Public Law[1] (*i.e.*, a half-course in Jurisprudence and a half-course in Public International Law)	15 Oct., 2 o'cl.	Prof. Sir Ludovic J. Grant, Bart	£4 4[2]
Civil Law[1]	15 Oct., 4 ,,	Prof. Mackintosh	5 5[3]
Scots Law	15 Oct., 9 ,,	Prof. Rankine	5 5[3]
Constitutional Law and History[1,4]	15 Oct., 5 ,,	Prof. Kirkpatrick.	4 4
Conveyancing	15 Oct., 9 ,,	Prof. Wood	4 4
Political Economy & Mercantile Law[1]	15 Oct., 5 ,,	Prof. Nicholson	3 3
Procedure and Evidence[5]	17 Oct., 5.30 ,,		2 2

SUMMER SESSION, 1896.

The Classes in the Faculty of Law will open as follows, and will close on Saturday, 18th July.

Classes.	Days of Opening, and Hours of Lectures.	Professors and Lecturers.	Class Fees.
Civil Law[1]	12 May, 9 o'clock	Prof. Mackintosh.	£5 5[3]
Scots Law	12 May, 9 ,,	Prof. Rankine	5 5[3]
Med. Jurisprudence	5 May, 10 ,,	Prof. Sir D. Maclagan	4 4
International Private Law[6]	12 May, 5 ,,	G. W. Burnet, M.A., B.L.	3 3

[1] Qualifying also for the degree of M.A.

[2] For a half-course, £2, 2s.

[3] This Fee is paid in Winter, and includes the Winter and Summer Sessions. Second Year's Course, £3, 3s. Fee for Winter Session only, £4, 4s.; for Summer Session only, £2, 2s.

[4] Half-course British, before Christmas, fee £2, 2s.; half-course Foreign, after Christmas, fee £2, 2s.

[5] It is expected that a new Lectureship on Procedure and the Law of Evidence will be instituted before October next.

[6] First course to be given in Winter Session 1895-96 on days and hours to be afterwards fixed.

MATRICULATION FEES.

For the Academical Year, 1st October to 1st October, .	£1 1 0
For the Summer Session only, 1st May to 1st October, .	0 10 6
But Candidates who appear for Examination in July, or for Graduation in August, are required to pay the Matriculation fee of £1, 1s., unless already Matriculated for the whole year.	
University entrance-fee in lieu of Matriculation for each of certain additional Courses (see Class Lists), . . .	0 5 0

Courses of Lectures.

1895-96.

I. CIVIL LAW.

PROFESSOR MACKINTOSH.

The full Course of Lectures on Civil Law extends over a Winter and a Summer Session, covered by one entrance-fee of £5, 5s. The Winter Lectures usually begin on 15th October, and continue until 20th March; the Summer Lectures usually begin on 12th May, and end on 20th July.

The subject-matter of the Course during the Winter Session is the same as that qualifying for Graduation in Arts. See page 121. The Summer Session is devoted to the doctrines of (1) Wills and Succession, (2) Obligations and Contract. The Contract of Sale will be dealt with in detail.

The Lectures are equally adapted for students intending to enter the legal profession in Scotland or England, or qualifying for service in India or the Colonies.

Text-Books.—The Institutes of Gaius and Justinian, and the Professor's "Roman Law of Sale."

The "Muirhead Prize" and the "Forensic Prize" are offered annually for competition.

II. SCOTS LAW.

PROFESSOR RANKINE, LL.D.

Students are strongly recommended to make themselves familiar either with Erskine's "Principles" or his "Institutes" (edition by J. Badenach Nicolson, Esq., 1871). A new edition (the nineteenth) of the former work will be issued before the beginning of the Session, and will be the text-book of the Class.

1. Sketch of the Literature of the Law of Scotland—the sources of the Law—the interpretation of Statutes.

2. Personal Relations—marriage and the modes of proving it—patrimonial effects of Marriage—rights of husband and wife—dissolution of Marriage—divorce—tutors and curators—minors—insane—parent and child—succession—heritable and moveable—wills—trusts.

3. Wrongs—personal injury—defamation—ownership of heritable property—rights and liabilities incident thereto—ownership of moveables—copyright—patents.

4. Obligations and Contracts—general requisites, constitution, and construction—partnership—joint-stock companies—factory and agency—sale—letting to hire—leases—carriers—shipping—insurance—bills of exchange—cautionary—extinction of obligations—diligence—bankruptcy.

5. Parochial Law—burgh and county law—rates and taxes.

6. Law of Evidence.

7. Criminal Law.

Summer Session.

The Lectures on Criminal Law, and part of the lectures on the above subjects, are delivered during the Summer Session.

III. CONVEYANCING.

PROFESSOR WOOD.

The Course of Lectures delivered from the Chair of Conveyancing will embrace the following subjects :—

BRANCH FIRST—*Deeds in General.*

1. Requisites as to external form, and the solemnities of execution and authentication. 2. Deeds privileged as regards these solemnities. 3. Delivery and acceptance.

BRANCH SECOND—*Deeds relating to Feudal Rights.*

1. Sketch of the feudal system and its bearing on the existing state of heritable rights in Scotland. 2. The writs constituting a feudal estate, and the respective rights of superior and vassal. 3. The writs used in the voluntary transmission, *inter vivos*, of such estate, and of lands formerly held by burgage tenure. 4. Charters by progress. 5. Services and Destinations. 6. Settlements and Marriage Contracts, so far as relating to heritage. 7. Entails.

BRANCH THIRD—*Miscellaneous Rights relating to Heritable Estate.*

1. Servitudes. 2. Leases. 3. Adjudications and Inhibitions. 4. Sequestrations. 5. Trust Deeds for Creditors. 6. Rights in Security. 7. Practical points on Examination of Title.

BRANCH FOURTH—*Miscellaneous Writs, relating mainly to Moveable Rights.*

1. Submissions. 2. Securities over moveables. 3. Cautioner's Writs. 4. Life Insurance Policies Writs. 5. Discharges. 6. Partnership and Company Deeds. 7. Factories. 8. Negotiable Instruments. 9. Shipping Writs. 10. Wills and Marriage Contracts.

IV. PUBLIC LAW.

PROFESSOR SIR LUDOVIC GRANT, BART.

Two Courses of Lectures will be delivered from the Chair of Public Law during the Session 1895-6.

1. A Course of Forty Lectures on the Philosophy of Law.
2. A Course of Forty Lectures on Public International Law.

1. The Course of Lectures on the Philosophy of Law will begin on Tuesday, 15th October 1895, at two o'clock.

The Lectures will be delivered five days a week. The course will be divided into two parts—

(*a*) The Science of Natural Law.

Books of Reference.—Green, Principles of Political Obligation. Ritchie, Natural Rights. Ahrens, Cours du Droit Naturel. Lerminier, Philosophie du Droit. Bluntschli, The Theory of the State. Lorimer, Institutes of Law.

(*b*) The Science of Positive Law.

Books of Reference.—The Student's Austin. Holland, Jurisprudence. Markby, Elements of Law. Sir Henry Maine's Works.

2. The Course of Lectures on Public International Law will begin on 7th January 1896.

The Class will meet *four* days a week. The Course will include—

(*a*) An Historical Retrospect.

(*b*) Some Account of the Science and Literature of Public International Law.

Books of Reference.—Ward's Enquiry into the Foundation and History of the Law of Nations. Wheaton's History of the Laws of Nations; Introduction. Nys's Les Origines du Droit International. Westlake's International Law. Phillimore's International Law, Vol. I. Bryce, Holy Roman Empire. Pardessus, Us et Coutumes de la Mer.

(*c*) An examination of the sources and a critical exposition of the leading doctrines of Public International Law.

Books of Reference.—Hall, International Law. Wheaton, International Law. Lawrence, Handbook of International Law. Woolsey, Introduction to the Study of International Law. Hertslet, Map of Europe by Treaty. Letters by Historicus. Pitt Cobbett, Select Cases.

V. CONSTITUTIONAL LAW AND HISTORY.

PROFESSOR KIRKPATRICK.

These Lectures, which qualify as a full Course for Graduation in Law and in Arts, are given in the Winter Session on Tuesdays, Wednesdays, Thursdays, and Fridays, at 5 P.M., and an examination is held monthly. Honours are awarded to students distinguished both in the class-examinations and in essay-writing.

Subjects :—(1) The Constitutional History and Law of England ; (2) The Constitutions of America, France, Germany, Switzerland, &c.

Text-Books.—(1) For elementary purposes, Taswell Langmead's "Constitutional History of England" and S. R. Gardiner's "Student's History of England." For further study, Stubbs's Select Charters and English Constitutional History; Hallam's Middle Ages, Chap. viii.; Hallam's Constitutional History of England ; Sir T. Erskine May's Constitutional History ; The English Constitution by W. Bagehot ; Guizot's Lectures on Representative Government ; R. Gneist's Self-Government in England, 3d edition, Berlin, 1871 ; Gneist's Geschichte und heutige Gestalt der Aemter und des Verwaltungsrechts in England, 2d edition, Berlin, 1866 ; Gneist's History of the English Constitution, translated by P. A. Ashworth, London, 1886 ; and Blackstone's Commentaries, Book IV., of Public Rights.

(2) For elementary purposes, Thwaites' The Colonies (Epochs of American History), Johnston's History of the United States, Macy's Our Government. For further study, Bryce's American Commonwealth, Bancroft's History of the Constitution of the U.S.A., Winsor's History of the U.S.A., Adams and Cunningham's Swiss Confederation, Dareste's or Demombyne's Constitutions, Boutmy's Studies in Constitutional Law, &c.

The History Reading-Room (adjoining the Lecture Room) may be consulted by all members of the Class on Mondays, Tuesdays, Thursdays, and Fridays, from 10.30 to 1.30 o'clock.

Auxiliary Course of Twenty Lectures on "The English Kingship," by Mr D. P. Heatley, the Professor's Assistant, on Wednesdays at 11 (free to all members of the Class).

VI. MEDICAL JURISPRUDENCE.

PROFESSOR SIR DOUGLAS MACLAGAN.

For Synopsis of this Course, *see* under Faculty of Medicine.

VII. COMMERCIAL AND POLITICAL ECONOMY AND MERCANTILE LAW.

For Synopsis of this Course, *see* under Faculty of Arts.

VIII. INTERNATIONAL PRIVATE LAW.

Lecturer—G. WARDLAW BURNET, M.A., B.L., Advocate.

A Course of Forty Lectures on this subject will be given during the Summer Session on Tuesday, Wednesday, Thursday, and Friday in each week, at 5 P.M., and examinations will be held from time to time on Mondays. Under Ordinances 39 and 40 attendance on these Lectures qualifies as a half-course for Graduation in Law (*see* Regulations for Graduation in Law, pp. 552 and 554). The subject is now included among those in which Intrants to the Faculty of Advocates may in future be examined, and the Lectures are therefore also adapted for students desiring to qualify for admission to the Scottish Bar.

The Lectures will deal with (*a*) The domain of International Private Law; (*b*) Its History and Literature (briefly); (*c*) Its general principles and their application in the Law (1) of Persons, including the subjects of Nationality and Domicile, Status and Capacity, Legitimacy, Marriage, Guardianship; (2) of Succession; (3) of Property; (4) of Obligations; and (5) of Procedure, including the theory of Jurisdiction, the Law of Evidence, and the recognition of Foreign Judgments.

Examinations will be held during the Session on the subjects dealt with in the Lectures.

Text-book recommended.—Westlake on Private International

Law. Students are also referred to Guthrie's Savigny, and Gillespie's Bar, and Foote on Private International Jurisprudence.

LECTURESHIP ON PROCEDURE AND EVIDENCE.

(*New Lecturer to be appointed shortly.*)

This Course of Forty Lectures will describe the various Courts of Scotland, with the nature of their jurisdictions, the actions applicable to each, and the details of the procedure, civil and criminal. It will also include the principles of the Law of Evidence.

Text-Books.—Mackay's "Manual" and "Practice of the Court of Session"; Coldstream's "Procedure in the Court of Session"; Dove Wilson's "Sheriff-Court Practice in Civil Causes"; Macdonald's "Criminal Law"; Macdonald's "Criminal Procedure (Scotland) Act, 1887;" Kirkpatrick on "Evidence."

Candidates for Graduation who pass in Procedure as an extra subject are entitled to have this fact recorded on their Diplomas.

Class Prize and Honours Lists.

SUMMER SESSION, 1894.

CIVIL LAW.

PRIZEMEN.—1. ("*Muirhead" Prize*), James Adamson, M.A. (Edin.); 2. A. J. Alison, B.A. (Oxon.); 3. Robert Brown and R. D. Melville, M.A. (Edin.)—equal.

HONOURS.—5. James Dunlop, M.A. (Glasg.); 6. A. B. Barty, M.A. (St Andrs.) and W. G. D. Simpson—equal; 8. A. M'Callum, M.A. (Edin.)

JAMES MACKINTOSH, B.A., *Professor.*

SCOTS LAW.

1. James Ballantine, M.A., Wigtownshire, and Robert Carmichael, Mid-Lothian—equal; 3. Robert Brown, Fife; 4. A. P. Nimmo, M.A., Fife (*Prizemen*); 5. Anstruther M'Gowan, Dumfriesshire;

6. David Ross; 7. Alexander S. Riach, Mid-Lothian; 8. William A. Thomson, Kincardineshire; 9. Hugh A. Hamilton, M.A., Ayrshire; 10. Francis Walkingshaw, jun., Mid-Lothian: 11. T. E. Young, Mid-Lothian; 12. M. S. Shaw, Perthshire; 13. H. R. Young, Ayrshire; 14. D. B. Ross, Forfarshire; 15. David Ballantine, Linlithgowshire: 16. J. F. Whyte, Mid-Lothian; 17. F. J. Trotter, Kincardineshire; 18. Thomas Rae, Lanarkshire; 19. Walter Murray, Caithness; 20. George Forsyth, Mid-Lothian, and J. E. Gibson, Wigtownshire—equal.

Essay Prizes.—1. A. P. Nimmo, M.A.; 2. James Ballantine, M.A., Herbert Robinson, and W. Ross-Garson—equal.

JOHN RANKINE, M.A., LL.D., *Professor.*

CONSTITUTIONAL HISTORY AND CONSTITUTIONAL LAW.

1. Charles Stewart Pennell; 2. Robert Gray (*Prizemen*); 3. William Ogilvy; 4. George Hart, M.A.; 5. John A. T. Robertson, M.A.; 6. Reginald Fleming Johnson; 7. R. D. Melville, M.A., and J. Aitken Welsh, M.A.—equal.

Essays.—1. R. F. Johnson; 2. C. S. Pennell (*Prizemen*); 3. George C. Rankin; 4. R. D. Melville, M.A.

Honourable Mention for Examinations and Essays.—J. A. Balck.

JOHN KIRKPATRICK, LL.D., *Professor.*

MEDICAL JURISPRUDENCE.

First-Class Honours.—1. J. A. Christie (*Medallist*); 2. Thomas Dawson and Alex. M'Callum—equal.

Second-Class Honours.—4. David Maxwell; 5. Robert Gray; 6. David Connel; 7. James Dunlop; 8. George Hart; 9. A. J. Allison and Thomas Hart—equal; 11. Charles Lippe; 12. Hugh A. Hamilton; 13. G. C. Steuart.

DOUGLAS MACLAGAN, Kt., M.D., *Professor.*

WINTER SESSION, 1894-95.

PUBLIC LAW.

Prizemen.—1. J. A. Christie; 2. H. A. Hamilton.

Honours.—3. R. Berry and G. Hart—equal; 5. R. D. Melville; 6. J. E. Dods and C. M. Gray—equal; 8. G. C. Steuart and R. C. Henderson—equal; 10. R. Macfie; 11. W. Ogilvie.

Essay-Prize.—R. Berry and J. A. Christie—equal.

Honourable Mention.—C. M. Gray, R. D. Melville.

L. J. GRANT, Bart., B.A., *Professor.*

CIVIL LAW.

PRIZEMEN.—1. William Burt., M.A. Edin. ; 2. C. A. Macpherson, M.A. Edin. ; 3. Robert Gray.

HONOURS.—4. T. Hart, M.A. Edin. ; 5. G. Hart, M.A. Edin. ; and W. Ruding—equal ; 7. J. Carr Lees ; 8. R. Berry, W. Brotherston, and Alastair Dallas—equal ; 11. A. M. MacEwen ; 12. C. M. Gray, M.A. St Ands. ; and Alex. Neil, M.A. Aber.—equal.

JAMES MACKINTOSH, B.A., *Professor.*

SCOTS LAW.

1. James Adamson, M.A., Forfarshire ; 2. Alexander G. Mitchell, Northumberland ; 3. Adam Myron, Sutherland ; 4. J. Dan Easson, Mid-Lothian, and James Young, Fife — equal ; 6. Grahame H. Wade, Stirlingshire ; 7. James A. Watson, Kincardine ; 8. Robert Robertson Black, Forfarshire (*Prizemen*) ; 9. James Henderson, Dumfriesshire ; 10. M. R. M'Ewen, Renfrewshire ; 11. David Stewart, Forfarshire ; 12. Robert Scott Sharpe, Forfarshire ; 13. Alexander Cowan, Kirkcudbrightshire ; 14. Thomas Crow, Mid-Lothian ; 15. James Paterson, Mid-Lothian ; 16. George L. Moffat, Dumfriesshire ; 17. J. Cousin Stevens, Perthshire ; 18. D. A. Morrison, Renfrewshire ; 19. W. J. Campbell Wilson, Berwickshire ; 20. John M'Allister, Dumfriesshire ; 21. William Annan, Forfarshire ; 22. John M'Murray, Wigtownshire, and R. D. Melville, M.A., Mid-Lothian—equal ; 24. John Stewart, Perthshire.

JOHN RANKINE, M.A., LL.D., *Professor.*

CONVEYANCING.

1. A. B. Fleming, Edinburgh ; 2. Mackenzie S. Shaw, Perthshire ; 3. James Mitchell, Kincardineshire ; 4. Alexander S. Riach, Mid-Lothian ; 5. Robert Brown, Fife, and David Ross, Ross-shire—equal ; 7. Charles Lippe, Aberdeen, and A. P. Nimmo, M.A., Fife—equal (*Prizemen*) ; 9. James N. Noble, Ayr ; 10. W. A. Thomson, Kincardine, and Robert Carmichael, Edinburgh—equal ; 12. Anstruther D. M'Gowan, Dumfriesshire ; 13. Hugh L. Yendall, Dumfriesshire, and Fred. J. M'Leod, Inverness—equal ; 15. Frank Jolly Trotter, Kincardine ; 16. Thomas Rae, Lanarkshire ; 17. David Ballantine, M.A., Linlithgow ; 18. Hugh P. Young, Ayrshire ; 19. John E. Gibson, Wigtown ; 20. George Banks, Edinburgh ; 21. Walter J. S. Dalling, Edinburgh ; 22. John T. Simpson, Linlithgow ; 23. T. E. Young, Edinburgh ; 24. Charles Anderson, Aberdeen, and John Sinclair, Caithness—equal ; 26. William Cowan, Edinburgh ; 27. James Murray Low, Lanark ; 28. Robert Macfie, M.A., Wigtown ; 29. David Webster, Banff ; 30. Arthur H. Duncan, Ross-shire ; 31. Andrew

Constable, Edinburgh; 32. Andrew M. Meldrum Perth; 33. William B. Mount, Forfar; 34. Joseph Chalmers, Edinburgh, and Walter Murray, Caithness—equal; 36. John Pringle, Forfar, and Norman S. Mackay, Edinburgh—equal; 38. David B. Ross, Forfar; 39. Peter Ferguson, Lanark, and William Ross Garson, Edinburgh—equal; 41. Hugh A. Hamilton, M.A., Ayr; 42. James F. Whyte, Edinburgh; 43. William Proudfoot Neill, Edinburgh; 44. Alex. Keddie, Edinburgh, and James Watson, Fife—equal; 46. John Myers, Edinburgh, and R. S. Craig, Edinburgh—equal.

J. P. WOOD, W.S., *Professor.*

CIVIL AND CRIMINAL PROCEDURE.

PRIZEMAN.—Robert Brown, Fifeshire.
FIRST-CLASS HONOURS.—William L. H. Paterson, Edinburgh.

J. J. COOK, M.A., LL.B., *Interim Lecturer.*

Regulations for Graduation in Law.

Two Degrees in Law are conferred upon Examination in the University of Edinburgh, viz., Bachelor of Law (B.L.) and Bachelor of Laws (LL.B.).

Either Degree admits to the Profession of Law Agent, provided the Candidate has included Scots Law and Conveyancing among his Graduation subjects, and has also passed an Examination in the Practice of the Courts to the satisfaction of the Examiners under the Law Agents Act.

The Degree of LL.B. (if the Candidate has been examined in (1) Civil Law, (2) Philosophy of Law, and International Law—Public or Private, (3) Constitutional Law and History, (4) Medical Jurisprudence, (5) Scots Law—Civil and Criminal, including Procedure, and (6) Conveyancing admits to the Profession of Advocate without further examination.

Either Degree qualifies for admission to the General Council of the University.

Candidates with the necessary qualifications for either Degree may present themselves for examination in any number, not less than two, of the subjects prescribed, and they may present themselves on one or more subsequent occasions for examination in the remaining subjects; but on each occasion they must pass in two subjects at least. Two Law Graduation Examinations are held annually, the first beginning on the last Monday in October, and the second on the third Monday in March.

A.—NEW REGULATIONS FOR DEGREES IN LAW.

For those who began the Study of Law, with a view to Graduation, before 1st October 1894, *see Regulations B, page* 557.

I. REGULATIONS FOR THE DEGREE OF BACHELOR OF LAWS (LL.B.).

(Applicable to all who began their Law Studies after 1st October 1894.)

I. No one is admitted to examination as a Candidate for the Degree of Bachelor of Laws (LL.B.) unless he be a Graduate in Arts of one of the Universities of the United Kingdom; or of any Foreign or Colonial University specially recognised for the purpose by the University Court.[1]

II. The course of study in Law for the Degree of Bachelor of Laws includes the following subjects:—[2]

(1) Jurisprudence, General or Comparative, during a course of not less than forty lectures.

(2) The Law of Nations, or Public International Law, during a course of not less than forty lectures.

(3) Civil Law, during a course of not less than eighty lectures.

(4) Law of Scotland, or Law of England, during a course of not less than eighty lectures.

(5) Constitutional Law and History, during a course of not less than eighty lectures.

(6) Conveyancing, during a course of not less than eighty lectures; or Political Economy, or Mercantile Law, during a course of not less than eighty lectures.

(7) Any two of the following subjects, namely:—International Private Law, Political Economy, Administrative Law, and Forensic Medicine; in each case during a course of not less than forty lectures.

III. (1) The course of study necessary for the Degree of Bachelor of Laws extends over three academical years, one of which at least must be spent in the University in which the Candidate intends to graduate, the other two may be spent in any other University or School of Law, specially recognised by the University Court.

(2) No Candidate for a Degree is deemed to have attended a class as part of the course of study necessary for that degree who does

[1] The following Degrees have been recognised in terms of this Section: B.A. of New Zealand University; B.A. of Cape of Good Hope University; B.A. of Dalhousie University, Halifax, Nova Scotia.

[2] For names of authorised extra-academical lecturers, *see* under Faculty of Medicine.

not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

IV. Candidates must undergo examination in the subjects prescribed in Section II. hereof; and they must pass at one examination in at least two of these subjects. Before presenting themselves in any subject the Candidates must have attended the requisite course of instruction in such subject. Candidates who have passed an examination for another degree in any of the said prescribed subjects in the same University may be exempted from examination in such subject or subjects, provided that the examiners are satisfied that the previous examination in such subject or subjects has been passed on a sufficiently high standard.

V. Every Candidate for the Degree of Bachelor of Laws is examined both orally and in writing on each of the subjects in the course of study above prescribed, in which he presents himself for examination.

VI. (1) Distinction may be awarded to Candidates who have displayed exceptional merit in their examinations.

(2) For the Degree of Bachelor of Laws a diploma is given, setting forth the subjects in which the Candidate has passed, and the distinction (if any) he has attained.

VII. The Examiners are the Professors of or Lecturers on the subjects included in the said examinations, and additional Examiners appointed by the University Court. The mode of conducting the examination is fixed from time to time by the Senatus Academicus.

VIII. Every student who at the time when this Ordinance came into operation had completed a part of his course with a view to Graduation as Bachelor of Laws in any Scottish University, under Regulations hitherto in force in that University, and who thereafter completes his course of study in conformity with such Regulations, may become a Candidate for the Degree of Bachelor of Laws without complying with the provisions of this Ordinance.

IX. This Ordinance came into force on 1st October 1894.

II. REGULATIONS FOR THE DEGREE OF BACHELOR OF LAW (B.L.).

(Applicable to all who began their Law Studies after 1st October 1894.)

I. No one is admitted to examination as a Candidate for the Degree of Bachelor of Law (B.L.) unless he be a Graduate in Arts of one of the Universities of the United Kingdom, or of any Foreign or Colonial University specially recognised for the purpose by the University Court: or until he has passed—

A. The Preliminary Examination in the Faculty of Arts,[1] or its equivalent, and

[1] See pages 124 and 140.

B. An examination in one of the Scottish Universities, to be conducted by the Examiners in Arts, in the following subjects, on the Standard of Examination for the Ordinary Degree of Master of Arts[1]:—

(1) Logic and Psychology; or, in the option of the Candidate, Moral Philosophy.

(2) Latin.

(3) One additional Arts subject, not being one of those which belong also to the Faculty of Law.

And he must have studied at least one of these subjects in a full course in a Scottish University, or an equivalent course in another University approved by the University Court.

II. The course of study in Law necessary for the Degree of Bachelor of Law must include the following subjects:—

1. Civil Law, during a course of not less than eighty lectures; or a half-course in Civil Law where in any University a full course is not available; provided that in the latter case, Candidates who are not already graduates in Arts are required to take in addition a course in such subject in Arts as may be sanctioned by the Senatus Academicus, or a half-course in one or other of the following branches of Law:—

(*a*) Jurisprudence, General or Comparative.
(*b*) The Law of Nations, or Public International Law.
(*c*) Constitutional Law and History.
(*d*) International Private Law.
(*e*) Mercantile Law.
(*f*) Administrative Law.

2. Law of Scotland, during a course of not less than eighty lectures.

3. Conveyancing, during a course of not less than eighty lectures.

4. Forensic Medicine, during a course of not less than forty meetings of the class; or, in the option of the Candidate, a half-course in one of the branches of Law specified in sub-section 1 of this section, if not already taken.

III. (1) The course of study in Law necessary for the Degree of Bachelor of Law extends over two Academical years.

(2) No Candidate for a Degree is deemed to have attended a class as part of the course of study necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

(3) The Candidate may prosecute his studies during the prescribed two years in one Scottish University, or in different Scottish Universities, or in a Scottish University and a University or School of Law specially recognised by the University Court; but one at least of these years must be spent, and all the examinations in the subjects mentioned in the preceding section must be passed, at the University in which he intends to graduate.

[1] See pages 127 and 150

IV. The Candidate for the Degree of Bachelor of Law must undergo examination and pass in the four or more subjects selected by him; but he may present himself for examination in one subject or group of subjects at a time, provided that he has completed the course of study for such subject or group of subjects, and provided also that in that case a higher standard of proficiency shall be exacted.

V. Every Candidate for the Degree of Bachelor of Law is examined, both orally and in writing, on each of the subjects in the course of study above prescribed, in which he presents himself for examination.

VI. (1) Distinction may be awarded to Candidates who have displayed exceptional merit in their examinations.

(2) For the Degree of Bachelor of Law a diploma is given, setting forth the subjects in which the Candidate has passed, and the distinction (if any) he has attained.

VII. The Examiners are the Professors of and Lecturers on the subjects included in the said examinations, and additional Examiners appointed by the University Court. The mode of conducting the examination is fixed from time to time by the Senatus Academicus.

VIII. Every student who at the time when this Ordinance came into operation had completed a part of his course with a view to Graduation as a Bachelor of Law in any Scottish University, under Regulations hitherto in force in that University, and has thereafter completed his course of study in conformity with such Regulations, may become a Candidate for the Degree of Bachelor of Law without complying with the provisions of this Ordinance.

IX. This Ordinance came into force on 1st October 1894.

EXAMINATIONS.

I. Preliminary Examination for B.L.

A.—For outlines of subjects on the M.A. Preliminary Standard, see page 124, and for Time Table of Examinations, see page 143.

B.—For outlines of subjects on Standard of Ordinary Degree of M.A., see page 150, and for Time Table of Examinations, see page 148.

II. Law Examinations (for Degrees of LL.B. and B.L.).

Subjects for October 1895 (*and till further notice*).[1]

In Public Law the subjects will be *The Philosophy of Law* and *Public International Law*. The books recommended for study are mentioned in the Synopsis of the Professor's Lectures.

[1] Examination papers will also be set in the additional subjects prescribed by the New Regulations if required.

In CIVIL LAW the examination for both degrees will be on the History of the Law of Rome, and on its Principles as explained in the Institutes of Gaius and Justinian. Candidates for LL.B. will also be examined on Book xviii., tit. i. (*De contrahenda emptione*) and Book xix., tit. i. (*de actionibus empti venditi*), of the Digest. The works of Professor Muirhead are recommended to Candidates.

In CONSTITUTIONAL LAW AND HISTORY the subjects will be—(*a*) Constitutional Law and History of England, down to the first Reform Act (Text-books, the works of Stubbs, Hallam, and May); (*b*) the Constitutions of the U.S. of America, of France, Germany, and Switzerland (Text-books, Bancroft, Bryce, Adam, and Cunningham, Dareste's "Constitutions"). See also Synopsis of the Professor's Lectures.

In the LAW OF SCOTLAND the subject will be the Municipal Civil Law. The works of Mr Erskine and Mr G. J. Bell in the latest editions are recommended to Candidates.

In CONVEYANCING the subject of examination will be Irredeemable Heritable Rights, including Entails.

In MEDICAL JURISPRUDENCE the subjects will be—(1) Narcotic Poisons; (2) Wounds; (3) Infanticide; (4) Death from Asphyxia; (5) Criminal Responsibility.

In POLITICAL ECONOMY[1] the examination will be on the subjects treated of in Mr J. S. Mill's "Principles of Political Economy." Candidates will also be expected to show some knowledge of the works of the recent writers mentioned in the Synopsis of the Professor's Lectures.

In INTERNATIONAL PRIVATE LAW Candidates will be examined on the subjects dealt with in the Lectures (see Synopsis), and in Westlake's *Private International Law*.

FEES.

1. PRELIMINARY EXAMINATION FOR B.L.

For each appearance, ...	£0 10 6

2. LAW EXAMINATIONS FOR LL.B. AND B.L.

The fee payable for LL.B. is	£6 6 0
or	
If the Examination be taken at two or more periods—	
For the First, ... £3 3 0	
For the Second, ... 3 3 0	
The fee payable for B.L. is	£5 5 0
or	
If the Examination be taken at two or more periods—	
For the First, ... £3 3 0	
For the Second, ... 2 2 0	

[1] Optional for LL.B. under the Old Regulations instead of Conveyancing; but see footnote 3, page 557.

Candidates who fail to pass in one or more of the subjects of Examination for LL.B. or B.L., pay a fee of 10s. 6d. for each subject in which they are re-admitted to Examination.

Fee for registration as a member of the General Council (if not already registered) £1.

B.—OLD REGULATIONS FOR DEGREES IN LAW.

(APPLICABLE TO ALL WHO BEGAN THE STUDY OF LAW, WITH A VIEW TO GRADUATION, BEFORE 1ST OCTOBER 1894.)

Candidates for the Degree of LL.B. must be Graduates in Arts of a Scottish, English, or Irish University, or of some other University approved of by the University Court.[1]

Candidates for the Degree of B.L., not Graduates in Arts, must have attended at least one Arts class during one Academic year in a British, Irish, or other recognised University, and must pass a Preliminary Examination in general knowledge according to the Regulations after stated.

The Degree of Bachelor of Laws was instituted by an Ordinance of the Universities' Commissioners, of 12th July 1862. The Degree of Bachelor of Law (B.L.) was instituted by the University, and approved by Her Majesty by Order in Council, dated 6th August 1874.

DEGREE OF BACHELOR OF LAWS (LL.B.).

The rules of the Ordinance, as amended by an Order in Council of 11th August 1884, are—

I. No one shall hereafter be admitted as a Candidate for the Degree of Bachelor of Laws (LL.B.) . . . unless he be a Graduate in Arts of one of the Universities of Scotland, or of England or Ireland, or a Graduate in Arts of a colonial[1] or foreign University, whose Degree may, for this purpose, have been specially recognised by the University Court.

II. The course of study in Law necessary for the Degree of Bachelor of Laws shall extend over three Academical years, and shall include attendance on a Distinct Course in each of the six following Departments, viz.:—

1. CIVIL LAW.....
2. LAW OF SCOTLAND.....
3. CONVEYANCING, or, in the option of the Candidate, POLITICAL ECONOMY[2]

} During Courses of not less than Eighty Lectures each.

[1] See footnote 1, p. 552.

[2] This option, initiated by the Faculty of Law, was approved by Her Majesty by Order in Council on 11th August 1884. Conveyancing, however, continues to be compulsory, both as to attendance and examination, for Candidates who desire their LL.B. degree to qualify them for the profession of a law-agent; and it continues compulsory as to attendance for Candidates for the Bar.

4. PUBLIC LAW ..... } During Courses of not less
5. CONSTITUTIONAL LAW and HISTORY } than Forty Lectures
6. MEDICAL JURISPRUDENCE [1] ..... } each.

III. No one shall hereafter be admitted to examination as a Candidate for the Degree of Bachelor of Laws, until he has completed the course of study above prescribed; and no one shall be admitted as a Candidate in any University unless two at least of the three Academical years of his course of study in Law shall have been in such University.

IV. Candidates for the Degree of Bachelor of Laws shall be examined, both in writing and *viva voce*, on each of the six Departments of Law above specified.

V. Each Candidate must satisfy the Examiners that he possesses a competent knowledge of Law in each of the said Departments; and the Examiners shall further, in judging of the qualifications of Candidates, have special regard to their acquirements in the two Departments of Public Law and Constitutional Law and History.

* * * * * * * *

IX. Each Candidate for the Degree of Bachelor of Laws shall pay a Fee of Five Guineas in respect of his Examination for the Degree.[2]

DEGREE OF BACHELOR OF LAW (B.L.).

The Rules of the Order in Council of 6th August 1874 sanctioning the Degree of B.L., are as follows:—

XII. No one shall be admitted to examination as a Candidate for the Degree of Bachelor of Law in the University of Edinburgh, unless he be a Graduate in Arts, qualified as prescribed in Section I. (of the Regulations for LL.B.), or unless he shall have studied in one of the Universities therein mentioned, during at least one Academical year, one or more of the subjects included in the course of study in the Faculty of Arts, and shall have passed a satisfactory examination in (1) Latin, (2) Greek, French, or German, and (3) any two of the following subjects—namely, Logic, Moral Philosophy, and Mathematics. The examinations shall be conducted by Examiners in Arts, together with some of the Law Examiners.[3]

XIII. The course of study in Law necessary for the Degree of Bachelor of Law in the University of Edinburgh shall extend over at

[1] See footnote 2, p. 552.

[2] If the examination is taken in two or more parts, the fee for the first is £3, 3s., and for the second, £2, 2s., no fee being payable in respect of any examination after the second.—Every Candidate for a Degree in Law must matriculate at the University for the year in which he appears for examination or for graduation. He must enter his name for graduation, and if not already a member of the General Council, must also pay the fee of £1 for Registration at least two clear days before the date of graduation.

[3] Candidates must pass in these subjects at the Ordinary Examinations for the Degree of M.A. in October and April (*see* REGULATIONS FOR GRADUATION IN ARTS).

least two Academical years, and shall include attendance on a distinct course, as specified in Section II. (of the Regulations for LL.B.), in each of the first three of the Departments therein mentioned,[1] and in any one of the other three Departments; and no one shall be admitted to examination as a Candidate for the said Degree, unless two Academical years of his course of study in Law shall have been in the University of Edinburgh.

XIV. The examination for the said Degree of Bachelor of Law in the University of Edinburgh shall be conducted at the same time, and in the same manner, as that for the Degree of Bachelor of Laws, and the Candidates shall be examined in each of the Departments of Law on which they shall have given attendance, as above required.

* * * * * * * *

XVI. The Fee to be paid by each Candidate for the Degree of Bachelor of Law in the University of Edinburgh shall be the same as is provided by Section IX., with reference to examinations for the Degree of Bachelor of Laws.[2]

Law Examinations (for Degrees of LL.B. and B.L.).

For subjects for October 1895 (*and till further notice*), *see page* 555.

DATES OF ENTERING AND TIME-TABLES OF EXAMINATIONS FOR ACADEMIC YEAR (1st OCTOBER TO 1st OCTOBER), AND FOR PAYMENT OF FEES.[3]

Candidates who cannot attend personally to pay the fees should transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts.[3]

I. Preliminary Examination for B.L.

Candidates who intend to present themselves for Examination may obtain Schedules at the Matriculation Office, University (Old) Buildings, which must be completed and lodged, and the fees paid at that office, not later than 20th September 1895 and 18th March 1896, for the autumn and spring Examinations respectively.

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[1] Viz., Civil Law, Scots Law, and Conveyancing: the option of Political Economy not applying to the B.L. degree.

[2] For Preliminary Examination in Arts, £1, 1s.; for First Examination in Law, £2, 2s.; for Second Examination in Law, £2, 2s. Under the Old Regulations no fee is payable in respect of any examination after the Second Examination in Law.

[3] If names are not entered, and fees are not paid, on or before the stated dates, a late-entry fee of ten shillings must be paid before the Candidate can be admitted to examination.

A.—For Dates, &c., on the M.A. Preliminary Examination Standard, see Time Table, page 143.

B.—Examinations on Standard of Ordinary Degree of M.A.

1895.

Sept.	20, Fri.	Names to be given in, certificates shown, and fees paid, *on or before* this date.
October	1, Tu.	French—1st Paper, 3-5.
,,	2, Wed.	German—1st Paper, 3-5.
,,	3, Th.	French—2nd Paper, 3-5.
,,	4, Fri.	German—2nd Paper, 9-11.

The Examinations in the other subjects take place at the same time as in the corresponding subjects for M.A. See page 148.

II. Law Examinations[1] for LL.B. and B.L. under New and Old Regulations.

1895.

October	21, Mon.	Names to be given in, certificates shown, and fees paid, *on or before* this date.
,,	28, ,,	Scots Law—9; Constitutional Law and History, 2.
,,	29, Tu.	Civil Law—9; Constitutional Law and History, 2.
,,	30, Wed.	Conveyancing—9; Political Economy, 9; Medical Jurisprudence, 2.
,,	31, Th.	Public Law—9-11, 12-2.
Nov.	1, Fri.	International Private Law, 9.
,,	4, Mon.	Oral Examinations begin.

1896.

March	9, Mon.	Names to be given in, certificates shown, and fees paid, *on or before* this date.
,,	16, ,,	Scots Law—9; Constitutional Law and History, 2.
,,	17, Tu.	Civil Law—9; Constitutional Law and History, 2.
,,	18, Wed.	Conveyancing, 9; Political Economy, 9; Medical Jurisprudence, 2.
,,	19, Th.	Public Law, 9-11, 12-2.
,,	20, Fri.	International Private Law, 9.
,,	23, Mon.	Oral Examinations begin.

Graduation Ceremonials.

April	11, Sat.	Names to be entered at least ten days previously.
August	1, Sat.	

[1] See footnote 3, page 559.

Examination Papers for Degrees in Law.

EXAMINATION PAPERS FOR LL.B. AND B.L.

SCOTS LAW.

Saturday, 21*st July* 1894.—9 *to* 1 *o'clock.*

(*Three Questions only in each group to be answered.*)

I.

1. Explain the computation of kinship and the forbidden degrees.
2. What rules obtain in regard to the custody and aliment of a bastard child of an ascertained father?
3. Explain (1) *jus mariti*. (2) putative marriage. To what extent has (1) been modified by statute? In the case of (2) what is the effect upon the status of the children?
4. In the law of wrongs what is meant by (*a*) *compensatio injuriarum*, (*b*) *convicium?*

II.

1. Describe the operation of constructive conversion in settlements.
2. What is *bonâ fide* perception and consumption; and how does it operate in our law?
3. Define and distinguish (*a*) pledge, (*b*) hypothec, (*c*) retention. What is hypothec over *invecta et illata?*
4. Trustees without special powers invest trust funds in shares of a trading company. What is their liability (*a*) to creditors of the company, (*b*) to beneficiaries?

III.

1. What is stoppage *in transitu?* When does the transit begin and end?
2. Who may be made contributories in the winding-up of a joint stock company?
3. A bill is accepted by mark; no place of payment is stated on the bill; the words describing the amount differ from the figures; and the payee is a non-existing person. Is the bill a good obligation; if so, where is it payable, for what amount, and to whom?
4. Expound the following:—homologation; *negotiorum gestio; indebiti solutio.*

IV.

1. In bankruptcy law, what is the meaning and effect of a *novum debitum?*
2. What is oath on reference? In what circumstances is it called for?

3. What is the meaning of (1) prorogated jurisdiction, (2) *actor sequitur forum rei?*

4. Explain demurrage; running down clause; insurable interest in life-assurance; action of furthcoming.

CONSTITUTIONAL LAW AND HISTORY.

Monday, 23rd July 1894.—2 *to* 4 *o'clock.*

FIRST PAPER.

(*Five Questions only to be answered.*)

1. Sketch the civil and ecclesiastical policy of William the Conqueror.

2. Describe briefly the legislation of Henry II., and its objects.

3. Explain and discuss the chief provisions of the Great Charter.

4. Trace the evolution of representative Parliaments from 1213 to 1295.

5. What is chiefly noteworthy in the rule of the "Great Plantagenet"?

6. Illustrate the powers and privileges of Parliament from the reigns of Edward II., Edward III., and Richard II.

7. Why are the Lancastrians said to have reigned constitutionally? Discuss the postion of the kingship during their period.

8. Review briefly one of—
   (*a*) Reign of Henry VII.
   (*b*) Civil Government of Henry VIII.
   (*c*) Character, position, and policy of Elizabeth.

9. Explain shortly any *three* of—*Confirmatio Cartarum*; Second Statute of *Præmunire*; Haxey's Case; Thorpe's Case; Election Statutes (1406-45); Star Chamber; Impeachment and Attainder; Supremacy and Uniformity; Monopolies.

Tuesday, 24th July 1894.—2 *to* 4 *o'clock.*

SECOND PAPER.

(*Five Questions only to be answered.*)

1. How and why did the House of Commons vindicate its privileges in the reign of James I.?

2. What led to the framing of the Petition of Right, and what were its provisions?

3. Why is John Hampden regarded as a "hero of constitutional history"?

4. Sketch the policy and legislation of the Restoration Parliament (1660-78).

5. Review the chief causes of the fall of the Stuart Dynasty.

6. What do you understand by the Revolution Settlement (1689, 1701)?

7. State the case of the "Aylesbury Men," and discuss the principles involved.

8. State and discuss one of—

(*a*) Wilke's Case.
(*b*) The American Rebellion.
(*c*) Catholic Relief.
(*d*) Parliamentary Reform.

9. Explain shortly any three of—Bate's Case; Cowell's Interpreter; Darnel's Case; Habeas Corpus Act; Septennial Act; Placemen in Parliament; Boston Port Act; Fox's Libel Act; Repeal of Test Acts; Reform Bill.

ROMAN LAW.

Monday, 23rd July 1894.—9 *to* 1 *o'clock.*

Candidates for LL.B., or for B.L. on the LL.B. standard, are expected to answer four questions in each of the Groups marked I. and V., and three in each of the other Groups.

Candidates for B.L., not aiming at the LL.B. standard, are expected to answer two of the questions in Group I., and three in each of Groups II., III., and IV., but need not answer any in Group V.

Group I.

1. Mention the principal sources from which the materials for Justinian's *Code* and *Digest* were drawn.

2. Give some account of Gaius and his writings.

3. Describe the nature and contents of the so-called *leges regiæ*.

4. Illustrate the working of the prætorian edict as it effected the law of property.

5. How were contractual engagements made effectual in the early period?

6. Distinguish the different forms which the imperial Constitutions assumed.

Group II.

1. Explain the phrase *heres sŭus et necessarius*. What advantage did such an heir possess?

2. What important changes in the law of adoption were introduced by Justinian?

3. What was the chief distinction between tutory and curatory? To whom were curators appointed?

4. What was *capitis diminutio minima*, and when did it occur?

Group III.

1. Titius builds a house on the land of Maevius. What are the rights and remedies of Titius and Maevius respectively

2. What conditions must concur in order that the ownership of a thing may be acquired by *usucapio?*

3. What value had a purely natural obligation?

4. What were the chief incidents of the contract of *societas?*

GROUP IV.

1. Who were *postumi sui*, and how might they be disinherited?

2. By what laws, and to what extent, was a testator restricted in bequeathing his estate by legacies?

3. What were noxal actions? Had a master such an action against his slave?

4. Explain the nature of the *actio Publiciana*, and of the interdict *quorum bonorum*.

GROUP V.

1. Translate:—"Inde quæritur, si in ipso corpore non erratur, sed in substantia error sit, ut puta si acetum pro vino veneat, aes pro auro vel plumbum pro argento vel quid aliud argento simile, an emptio et venditio sit" (*Dig.* xviii. i. 9, 2).

State and illustrate the principle on which such cases as the above were decided.

2. Translate:—"Res in aversione empta, si non dolo venditoris factum sit, ad periculum emptoris pertinebit, etiamsi res adsignata non sit" (*Dig.* xviii. i. 62, 2).

State the rules contained in this Title regarding the incidence of the Risk in a contract of sale.

3. Under what circumstances and to what effect could a man purchase a thing already belonging to him (*res sua*)?

4. Translate:—"Cum quis ex aliena materia speciem aliquam suo nomine fecerit, Nerva et Proculus putant hunc dominum esse qui fecerit, quia quod factum est antea nullius fuerat. Sabinus et Cassius magis naturalem rationem efficere putant ut qui materiæ dominus fuerit, idem ejus quoque quod ex eadem materia factum sit dominus esset, quia sine materia nulla species effici possit" (*Dig.* xli. i. 7, 7).

Comment on the reasoning of this passage, and explain the law on the subject as settled by Justinian.

5. Translate and comment on the terms of the following passage:—"Alluvio agrum restituit eum quem impetus fluminis totum abstulit. Itaque si ager qui inter viam publicam et flumen fuit inundatione fluminis occupatus esset, sive paulatim occupatus est sive non paulatim, sed eodem impetu recessu fluminis restitutus, ad pristinum dominum pertinet: flumina enim censitorum vice funguntur, ut ex privato in publicum addicant et ex publico in privatum" (*Dig.* xli. i. 30, 3).

6. What were the requisites of *traditio* as a mode of transferring property?

CONVEYANCING.

Monday, 23rd July 1894.—10 *to* 2 *o'clock.*

(*Twelve Questions only to be answered.*)

1. Sketch the clauses of a Bond and Disposition in Security, and state shortly its purposes and effects.

2. What are the methods by which an Heir of Entail in possession can borrow money over the Entailed Estate for past and future improvement expenditure?

3. Discuss the legal position of the holder of a Security by way of *ex facie* absolute Disposition.

4. Explain the method of constituting a Security for borrowed money over a Lease registered under the Registration of Leases Act, 1857.

5. What is a Writ of Acknowledgment?

6. Discuss the rule that a Submission falls by the death of one of the parties-submitters, and explain the exceptions to that rule.

7. Deal shortly with the position of the Oversman in a Submission, treating of the Arbiter's power to appoint the Oversman, the method of appointment, and the extent of the Oversman's powers.

8. State the points to be kept in view in framing an Award or Decree-Arbitral by Arbiters or by an Oversman, and give the exceptions to the rule that an Award executed in Scotland upon a formal written Submission, also executed there, must be probative.

9. Explain the present position of the law as to the reduction of Awards.

10. What is a Cautionary Obligation? What were the two special privileges of Cautioners? How far do these privileges still exist?

11. What is the law, as explained in recent decisions, as to the liability of a Cautioner for a Cash-Credit for interest which has been accumulated on, and added to, the cash-credit account?

12. In what ways can a Cautioner be discharged?

13. Discuss the subject of dissolution of an ordinary Partnership, giving usual variations in the Contract of Copartnery, and stating shortly the provisions on this point of the Partnership Act, 1890.

14. Frame the clause in an Ante-Nuptial Contract of Marriage declaring that the provisions to the husband's children are in full of their legal rights. Give explanations.

15. State shortly the provisions of "The Policies of Assurance Act, 1867," as to the intimation of assignations of Life Insurance Policies.

MEDICAL JURISPRUDENCE.

Wednesday, 25th July 1894.—2 *to* 4 *o'clock.*

I.—*Identity of the Dead.*

A dead body may be identified by scars, birth-marks, or tattooing.
State what is the nature of a scar.
State whether or not tattoo-marks may disappear during life.

II.—*Wounds.*

What is the chief source of danger from incised wounds?
What appearance does death from this cause leave in the dead body?
How may death occur from a wound in the throat where there has been no injury to the air-passages, and no profuse bleeding?

III.—*Concealment of Pregnancy.*

What is the law as to concealment of pregnancy?
How, without entering on medical details, may it be made out that a woman has recently borne a child?

IV.—*Criminal Responsibility.*

Give a short account of the case of M'Naughton (1843), and state how far it illustrated the legal and medical tests of responsibility.

PUBLIC LAW.

Wednesday, 25th July 1894.—9 *to* 1 *o'clock.*

I.—Philosophy of Law.

(*Three Questions in each of Groups A and B will suffice.*)

A. Science of Natural Law.

How are Ethics and the Philosophy of Law related?

2. What, according to Professor Lorimer, are the primary and secondary sources of Natural Law?

3. Give some account of, and criticise, the Sophistic "Philosophy of Law."

4. "The principles of Justice and Charity are identical." Discuss.

5. Contrast the ancient and modern conceptions of the State.

6. Examine the chief theories regarding Punishment.

7. Write upon *one* of the following:—
   (*a*) The movement from Status to Contract.
   (*b*) Freedom of Contract.
   (*c*) Primogeniture.

B. Science of Positive Law.

1. On what grounds does the Analytical School exclude from the province of Jurisprudence (*a*) The laws of God. (*b*) The laws of honour. (*c*) Physical laws?

2. State what you know about "Judicial Decision" and "Equity" as sources of Law. In what other ways do rules of Law originate?

3. Into what elements may a Contract be analysed? What objection has been taken to Savigny's analysis?

4. Briefly sketch the stages of development of Remedial rights.

5. Distinguish between the following:—

(*a*) Substantive and Adjective Law.

(*b*) Written and Unwritten Law.

(*c*) The Law of Persons and the Law of Things.

II.—Public International Law.

(*Five Questions will suffice.*)

1. "The law obtaining between nations is not positive law" (Austin). Discuss.

2. Enumerate and give a short account of the mediæval Maritime Codes. Is it correct to speak of these as "International Law"?

3. Describe as fully as you can the functions, character, and constitution of a Prize Court, and estimate the value of its decisions as sources of International Law.

4. What is Recognition of Belligerency? When may it be accorded? What are its effects? How is it accorded?

5. (*a*) Is the Consul a Public Minister?

(*or alternatively*),

(*b*) Describe the documents necessary to a Diplomatic Agent.

6. By what forcible methods, short of actual war, may international disputes be settled? Illustrate.

7. What are the effects of a Treaty of Peace?

8. What are a Neutral's obligations with reference to the equipment of vessels of war in his territory?

9. State the law regarding the Analogues of Contraband.

Graduates in Law.[1]

DEGREE OF LL.B., 1889-1895.

1889.

David Anderson, M.A.
Claud Patrick Boswell, M.A.
Archibald Brown Campbell, M.A.
*Andrew Henderson Briggs Constable, M.A.
*Alistair Davidson, M.A.
*Matthew Robin Greenlees, M.A.
James Arthur Hope, M.A.
*William Hunter, M.A.
*Robert Bird Kerr, M.A.
Francis Kinloch, B.A.
*George Fleming Mathers, M.A.
*John Hepburn Millar, M.A.
*Charles David Murray, M.A.
*Coventry Dick Peddie, M.A.
John Ritchie, M.A.
*Hamish Hay Stuart, M.A.
Arthur Moodie Thomas, M.A.
*Alexander Thomson, M.A.

1890.

*Duncan Mearns Abel, M.A.
*James Roberton Christie, M.A., LL.B. (Glasg.).
*William Scott Currie, M.A.
Edmund John Gunn, M.A.
Neil James Kennedy, B.A.
William James Kippen, B.A.
Lawrence M'Laren, M.A.
John Liddell Officer, M.A.
Alexander David Russell, M.A.
*William Thomson, M.A.

1891.

Andrew Brown, M.A.
Charles Walker Bruce, M.A.
Robt. Jeffrey Cunningham, M.A.
James Wright Forbes, M.A.
Henry William Gibson, M.A.
Alexander Gray, M.A.
William Gray, M.A.
*James Mercer Irvine, M.A., B.Sc.
*Erskine Dawson Jamieson, M.A.
*Thomas Johnston, M.A.
Robt. Carmichael Malcolm, M.A.
*Thomas Brash Morison, M.A.
C. Morrison, M.A.
*Andrew Fleming Smith, M.A.
James Robert Earl Monteith Smith, M.A.
Michael Smith, M.A.
*Robert Macaulay Smith, M.A.
Frederick Mills Spankie, M.A.
Alex. Arthur Granger-Stewart, M.A.
*Robert Moir Williamson, M.A.
John Buchanan Young, M.A.

1892.

James Barty, M.A.
William Brown, M.A.
*John Sproat Taylor Cameron, M.A.
*William Chree, M.A.
John Marr Davidson, M.A.
*James Grant, M.A.
Augustus Wallace M'Gregor, M.A.
Thomas John Millar, M.A.
Alexander John Raeburn, M.A.

1893.

George Haskell Boyd, M.A.

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[1] The names of all the Graduates in Law from the institution of the Degrees to 1888 will be found in the List of Graduates of the University, published in 1889, pp. 125-127. See also previous Calendars.

* Passed with distinction. "Distinction" was instituted in October 1885. Several of the Graduates of 1885-88 passed part of their Examinations before any record of distinction was preserved.

Thomas Sanderson Hepburn Burns, M.A.
*William Findlay, M.A.
Louis Carr Hallard, M.A.
*William Ingram, M.A., D.Sc.
*Robert Munro, M.A.
William Dormond Munro, M.A.
*Alexander Blairford Smith, M.A.
Thomas Callander Wade, M.A.
John Peregrine Robertson White, M.A.

13th April 1894.

*Alexander Brown, M.A.
Ian MacIntyre, M.A.

1st August.

Robert Smith Craig, M.A.
William Graham, M.A.
*James M'Robie, M.A. (*In absentia*).
David Maxwell, M.A.
George Morton, M.A
John Purves Smith, M.A.
Frederick James Thomson, M.A.
*John Aitken Welsh, M.A.

17th April 1895.

William Dunbar MacDougall, M.A.
Walter James Robertson, M.A.

DEGREE OF B.L.

1889.

*Robert Liddell Cockburn.
William Stowell Haldane.
John Lumsden Macpherson, M.A.
John Glover.
John James Waugh.

1890.

Duncan Cameron
Duncan Archibald Maccoll.
Robert Watson.

1891.

John Scrymgeour Hepburn.
John Nisbet.
William Alexander Stewart.
Thomas Trotter.

1893.

John Romanes.
Thomas Edward Taylor, M.A.

1st August 1894.

*Alexander Douglas Donald.
Buckham William Liddell.

17th April 1895.

William Alexander Cullen.

DEGREE OF DOCTOR OF LAWS (LL.D.).[1]

The Degree of Doctor of Laws is conferred *honoris causâ tantum*. It was first granted in 1695. Previously to 1751 it had been conferred on seven persons only. Since then more than 400 names, including some of the most distinguished in Europe, have been added to the list. The degree is not conferred in absence except in very special cases.

* Passed with Distinction. See note 2 on page 568.

[1] Those to whom the Degree has been offered, if unable to be present at the Graduation Ceremonial immediately ensuing, may present themselves at any subsequent Ceremonial, on giving at least a week's notice.

The following is a list of those upon whom the Degree of Doctor of Laws has been conferred in 1889-1895 : —[1]

1889.

[2] Sir Syed Ahmed Khan, Bahadûr, K.C.S.I.
J. E. T. Aitchison, C.I.E., M.D., F.R.S., &c.
[2 3] James D. Dana.
[2] Francis Day, C.I.E., &c.
[2] Hon. David Dudley Field.
[2 3] C. Gegenbaur.
[2 3] E. Haeckel.
[2] Rudolf von Jhering, Dr. Jur.
[2 3] E. E. Kummer.
William Mackintosh, M.A., Q.C.
[2 3] Konrad Maurer.
Maurice Paterson, B.A.
Richard Quain, M.D., F.R.S., &c.
[2] Rudolf von Roth, Ph.D.
[2 3] Barthélemy St. Hilaire.
[2 3] Jules Simon.
Whitley Stokes, C.S.I., C.I.E., D.C.L., &c.
[2 3] Geheimrath Heinrich von Sybel.
James Ward, M.A., D.Sc.
[2] William Dwight Whitney.
[2 3] B. Windscheid.

1890.

Sir Benjamin Baker, C.E.
Pierre Paul Leroy-Beaulieu.
Right Hon. Henry Chaplin, M.P.
Sir Dyce Duckworth, M.D.
Sir John Fowler, Bart., C.E.
[2] James Anthony Froude, M.A., LL.D.
Joseph H. Gilbert, M.A., Ph.D., LL.D., F.R.S.
William W. Goodwin, D.C.L.
James Hardy.
Sir John Kirk, M.D., G.C.M.G.
General Robert Maclagan, R.E.
John Marshall, M.A.
Right Hon. J. P. B. Robertson, M.P.
Frederic Seebohm, F.S.A.
[2] Emeritus-Professor C. Piazzi Smyth, F.R.A.S., &c.
H. M. Stanley.
Spencer Walpole.

1891.

Alexander Asher, Q.C., M.P., &c.
John Beddoe, M.D., F.R.S, &c., &c.
Major C. R. Conder, R.E., D.C.L.
Felix Dahn.
Alexander Campbell Fraser, D.C.L., LL.D.
Cunningham Geikie, D.D.
George Joachim Goschen, M.P.
Sir George Murray Humphry, M.D., F.R.S.
Colonel Sir Colin Campbell Scott Moncrieff, K.C.M.G., C.S.I.
Professor Simon Newcomb.
Sir Herbert Stanley Oakeley, M.A., Mus. Doc., LL.D., D.C.L.
John Johnstone Rogerson, B.A., LL.B.

1892.

Surgeon-General James Macnabb Cuningham, M.D., &c.
[2] Rev. C. V. A. Van Dyck, M.D., D.D.

[1] The names of those who received the Degree prior to 1859 will be found in the "Catalogue of the Graduates in the Faculties of Arts, Divinity, and Law of the University of Edinburgh since its foundation," published in 1858, and of those who received the Degree from 1859 to 1888, both years included, in the List of Graduates published in 1889, and in previous Calendars.

[2] Conferred *in absentia*.

[3] Tercentenary Graduates unable to be present in 1884.

Robert M. Ferguson, Ph.D., F.R.S.E.
Rt. Hon. Sir Edward Fry.
[1]Theodore Nöeldeke.
Dr Jakob Schipper.
Hon. Sir Charles Tupper, Bart., G.C.M.G., C.B., M.D.
[1]Rev. Thomas Walker, M.A.
Robert Boog Watson, B.A., F.R.S.E.

1893.

Geheimrath Professor Dr Arthur Auwers.
Sir I. Lowthian Bell, Bart., F.R.S.
John Sutherland Black, M.A.
Sir George Buchanan, M.D., F.R.S.
Rt. Hon. Sir Stuart Knill, Bart.
Henry Duncan Littlejohn, M.D., F.R.C.S. Edin.
Alfred Marshall, M.A.
John Rhys, M.A.
His Excellency General the Right Hon. Lord Roberts, of Candahar, G.C.B., G.C.I.E., V.C., R.A. (B.).
Lieut.-Colonel Justin C. Ross, C.M.G.
Rev. Walter C. Smith, D.D.
Alexander Moody Stuart.
Ramsay Heatley Traquair, M.D., F.R.S.

13th April 1894.

John Taylor Brown.
W. H. Gaskell, M.D., F.R.S., Lecturer on Physiology, University of Cambridge.
Henry Goudy, M.A., LL.B., Regius Professor of Civil Law, Oxford.
Charles B. Logan, W.S., Deputy Keeper of the Signet.
David Patrick, M.A., B.D.
Right Hon. James Alex. Russell, M.A., B.Sc., M.B., C.M., Lord Provost of Edinburgh.
George Wilson, M.A., M.D., Medical Officer of Health, Mid-Warwick.

1st August.

Professor Franz Kielhorn, Ph.D., University of Göttingen.
Professor Diodato Lioy, Doctor of Law, University of Naples.
Rt. Hon. Sir Charles John Pearson, M.A., Q.C., M.P., Dean of the Faculty of Advocates.

17th April 1895.

Rev. William Cunningham, M.A., D.Sc., D.D., Fellow of Trinity College, Cambridge; Tooke Professor of Economic Science and Statistics, King's College, London.
The Hon. Lord M. T. Stormonth Darling, M.A., Senator of the College of Justice.
Professor W. M. Flinders Petrie, M.A., D.C.L., Edwards Professor of Egyptology, University College, London.

[1] Conferred *in absentia*.

Bursaries, Scholarships and Prizes, &c., in the Faculty of Law.

I.—BURSARIES.

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patron.
I.	1873	The Grierson Trustees.	£80 0 0	3	1	About £26 13 4	Senatus.
II.	1873	Geo. Cairns, Solicitor.	18 19 4	1	1	About 18 19 4	Senatus.
III.	1878	Dr Andrew Thomson.	100 0 0	4	4	25 0 0	Trus. of Dr Thomson.

I. There are three Grierson Bursaries, each of the value of £26, 13s. 4d. annually. Deserving students from the parishes of Crawford or Leadhills, applying to the Clerk of Senatus on or before the 1st day of September, are entitled to preference, if they satisfy certain conditions;[1] and if the applicant is commencing his first Winter Session of the Law Curriculum he will be entitled to hold the Bursary for three years, provided "he prosecutes his studies with proper diligence."[1] The subjects of examination are Elementary Latin, English, and Arithmetic. See Outline of Subjects, pages 124 and 140, and Time-Table of Examinations, pages 143 and 144.

Failing preferential candidates, the Bursaries will be tenable for one year only, and will be awarded to candidates who have attended one year in the Faculty of Arts in some University, and have applied as above-mentioned to the Clerk of the Senatus. 1. In the case of those commencing their first Winter Session in Law, the award will be to the candidate who has passed highest in Latin and Moral Philosophy at the Arts Graduation examination in October. 2. In the case of candidates commencing their second Winter Session—to the most distinguished law-student of that standing, who, if not a Graduate in Arts, has passed satisfactorily in Latin and Moral Philosophy at the Arts Examination, either in October or earlier. 3. In the case of candidates commencing the third Winter Session of the Law Curriculum—to the most distinguished law-student of that standing who has passed satisfactorily in Latin, Moral Philosophy, and Logic at the

[1] See CALENDAR 1877-78, p. 370. By "proper diligence" is understood regular attendance on Classes, and reasonable proficiency in Class Examinations.

Arts Examination in October or earlier. See Regulations, CALENDAR 1877-78, p. 370. *Bursars in* 1894—First year, *J. A. Christie, M.A.* Second year, *A. P. Nimmo, M.A.* Third year, *James Adamson, M.A.*

II. The competition for the Cairns Bursary, which is tenable for one year only, and is not subject to any preferences, is subject to the same conditions as those for the second year Grierson Bursary. This Bursary is open to Students who have completed one year in the Law Faculty. *Bursar*—1894, *R. D. Melville, M.A.*

III. For the *Thomson Bursaries* application should be made to Messrs Traquair, Dickson & Maclaren, 11 Hill Street. Candidates of the name of Thomson or Traquair, or natives of the town or county of Dumfries, or of the city of Edinburgh, are preferred. The Examination is in Latin and Moral Philosophy, and is the same as the October Examinations in those subjects for M.A. See CALENDAR 1879-80, p. 345. *Bursars*—1891, *Alexander M'Callum.* 1892, *Robert Macfie.* 1893, *James MacKenna.* 1894, *Malcolm M. MacInnes, M.A.*

Bursaries in the Faculty of Arts, the holders of which may study in the Faculty of Law (see also under Faculty of Arts):—

No. of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patron.
I.	1809	Dr Donald Grant, London.	£180 0 0 About	4	4	£45 0 0 About	Dr Grant's Trustees.
II.	1846	John Jamieson, Edinburgh.	26 0 0 About	1	4	26 0 0	Principal and Two Professors.
III.	1871	The Sibbald Bursaries.	150 0 0	5	3	30 0 0	Trustees of Dr J. R. Sibbald.
IV.	1883	Wm. Renton, Edinburgh.	19 19 6	1	1	19 19 6	Professors of Mathematics, Natural Philosophy, Chemistry, and Political Economy.
V.	1886	R. Allan, Feuar, Kelso.	About 90 0 0	3	3	About 30 0 0	Trustees of R. Allan
VI.	1889	Daniel MacLaurin, London.	70 0 0	1	4	70 0 0	Town Council.

II.—SCHOLARSHIPS.

GENERAL REGULATIONS FOR VANS DUNLOP SCHOLARSHIPS.

Four Vans Dunlop Scholarships, each of about £100 per annum, tenable for three years, are more or less directly connected with the Faculty of Law:—

Candidates for Nos. I. and IV. must have regularly attended in at

least one class in the University of Edinburgh during each Winter Session in which they claim to have been Matriculated Students; and no Candidate is eligible who has discontinued attendance at the University for more than one year.

Candidates for a Vans Dunlop Scholarship must enter their names and addresses *at least a fortnight* before the date of examination, at the *Matriculation Office, University, Edinburgh*, and produce evidence that they are eligible. They are required to be Matriculated students of the year in which the competition takes place.

I. *Vans Dunlop Scholarship in Commercial and Political Economy and Mercantile Law*, for which both Law and Arts Students are eligible. The Regulations for competition are as follows:—

(*a.*) Candidates are subject to an examination testing their knowledge (1) of Commercial and Political Economy, and (2) of Mercantile Law—two papers on the former and one on the latter.

(*b.*) The Competition is open to all who have been Matriculated Students for not less than two years, and who have regularly attended the Class of Commercial and Political Economy and Mercantile Law.

(*c.*) The Professor of Political Economy and an Examiner appointed by the Senatus are the Examiners.

Next vacancy in November 1895.

Scholars—1892, *Cameron Morrison*, LL.B. *Prox. access.*—*J. R. Christie*, LL.B.; *A. B. Clark*, M.A.

II. *Vans Dunlop Scholarship in the Law of Nature and Nations, Civil Law, and Constitutional Law and History.* The Regulations for competition are as follows:—

(*a.*) The Competition is open to all Candidates who, within the three years immediately preceding the date of competition, shall have graduated in Law in this University, or shall have passed the Graduation Examination in the three subjects of examination for the Scholarship: provided they have written papers of the LL.B. standard at the Graduation Examination, and have obtained an average of not less than 75 per cent. of marks in these subjects.

(*b.*) The Competition is by written Essays on branches of law to be announced at least one year before the date of competition. The precise subject of each of the essays will be set on the conclusion of the Graduation Examination in October.

(*c.*) The Examiners are the Professors of the prescribed subjects, assisted by the additional Law Examiners.

Next vacancy in November 1895.

Scholars—1892, *J. S. Taylor Cameron*, LL.B.; *prox. accesserunt*—William Chree, LL.B.; Alexander Thomson, LL.B.

III. *Vans Dunlop Scholarship in Scots Law and Conveyancing.*

(*a.*) The Competition is open to all Candidates who, within the

three years immediately preceding the date of competition, shall have graduated in Law in this University, or shall have passed the Graduation Examination in Scots Law, Conveyancing, and Medical Jurisprudence : provided they have obtained at the Graduation Examination an average of not less than 75 per cent. of marks in these three subjects.

(*b.*) The Competition is by written Essays on (1) the Civil Law of Scotland, (2) the Criminal Law of Scotland, and (3) Conveyancing, the particular branches of which will be announced at least one year before the date of competition. The precise subject of each essay will be set on the conclusion of the Graduation Examination in October.

(*c.*) The Examiners are the Professors of the prescribed subjects, assisted by the additional Law Examiners.

Next vacancy in October 1896.

Scholars—1893, *Alexander D. Donald, B.L.*

CONDITIONS OF TENURE.

Each holder of No. II. and No. III. of these Scholarships will be required to deliver, to the satisfaction of the Faculty of Law, two courses of three lectures each on one of the subjects of examination for the Scholarship, viz., one course in the second, and the other in the third year of his tenure.

IV. *Vans Dunlop Scholarship in History.*

The Competition is open to all Matriculated Students who have regularly attended classes in the University for not less than two and not more than six years, and who have also attended one or more courses of lectures on General or on Ecclesiastical History.

The Scholarship will be awarded by competitive examination. The Examiners are the Professors of History and of Ecclesiastical History, and either the Professor of Latin or the Professor of Greek.

Next vacancy in October 1895.

1892. John Linton, M.A.	*Prox. accesserunt*—J. E. Pickles, W. B. Stevenson, M.A.

V. THE LORIMER TRAVELLING SCHOLARSHIP.

The Lorimer Travelling Scholarship, of the annual value of about £50, tenable for two years, for the encouragement of the study of the "Law of Nature and Nations" in foreign Law Schools by Students and Graduates in the Faculty of Law, was founded by the Lorimer Memorial Committee and the Association for the better Endowment of the University. The Scholarship is open to Candidates who, during the two years immediately preceding that in which a scholar falls to be appointed, have completed the examinations for a Degree in Law in the University in the following subjects, namely—(1) The "Law of Nature and Nations" (including therein the Philosophy of

Law); (2) The Civil Law; and (3) Either (*a*) Constitutional Law and History, or (*b*) Political Economy. The foreign Law School or Schools which the Scholar proposes to attend must be previously approved by the Faculty of Law. The Candidate who, in the opinion of the Faculty of Law, passes with most distinction in the examinations for Graduation in Law, in the subjects above set forth, during the two years immediately preceding the election, and who is willing to fulfil the conditions imposed by the Deed of Foundation, will be eligible, consideration being always given to his proficiency in the first of the above-named subjects, and to his knowledge of the modern language or languages spoken in the Law School or Schools where he proposes to study. For Deed of Foundation, see CALENDAR for 1892-93, p. 538.

This Scholarship will be offered for competition in July 1897.

III.—WILLIAM DICKSON TRAVELLING FUND.

This fund is for the purpose of assisting Graduates of any Faculty of not more than three years' standing to travel for the purposes of study or research. For particulars, see page 358.

IV.—THE FORENSIC PRIZE.

This Prize, of the value of £10, founded in 1858 by the Forensic Society with the view of encouraging the study of Roman Law, is awarded either in July or in October, as may be found convenient. It can be competed for only by Students of the Civil Law Class during the preceding year. The Fund, amounting to about £280, is invested in the name of the Dean and Treasurer of the Faculty of Advocates and the Professors of Civil and Scots Law.

1890 { Alex. Brown, LL.B. } equal
{ T. B. Morison, LL.B. }
1891. Thomas C. Wade.
,, *Prox. access.*—Robt. Munro, M.A., and A. D. Donald.
1892. Charles Lippe, M.A. (Aber.).
Prox, access.—C. R. Gillies Smith, M.A. (Edin.).
1893. F. M. Anderson, M.A.
1894. *R. D. Melville, M.A.*

SCHOLARSHIPS, BURSARIES, AND PRIZES, &c., OPEN IN 1895-96.

Candidates for Scholarships must enter their names and addresses, and exhibit the necessary certificates, at the Office of the Clerk of Senatus at least fifteen days before the date of the competition.

The examination for first-year Bursaries is in Latin and Moral Philosophy. Candidates to give in their names on or before 2nd October. Applicants for the second and third year Grierson Bursaries must

apply on or before 15th October, and must state what distinctions they have attained in the Law Classes of the previous year.

Applications for grants from the William Dickson Travelling Fund must be lodged on or before 15th March.

Where the competition is open to Graduates, their standing will be computed from the date of the Graduation Ceremonial immediately following the completion of their Law Examinations.

I.—Scholarships.

No. I. of the above Scholarships will be open for competition after the conclusion of the Graduation Examination in October 1895. The works on Political Economy recommended to Candidates are :—

Adam Smith's *Wealth of Nations*, Books III., IV., V.
Nicholson's *Principles of Political Economy*, Vol. I.
Marshall's *Principles of Economics*, Vol. I.
Sidgwick's *Principles of Political Economy*, Book III.
Nicholson's *Money and Monetary Problems* (2nd ed.), Part II.
Wieser's *Natural Value* (translated).
Cunningham's *Growth of English Industry and Commerce*, Vol. I.
Nicholl's *History of the English Poor Law*; and *History of the Scotch Poor Law.*
Bastable's *Public Finance.*
Those on Mercantile Law :—
Smith's *Mercantile Law* (10th ed.).
Abbot on *Shipping* (13th ed.).
Benjamin on *Sales* (3rd or 4th ed.).

No. II. will be offered for competition after the conclusion of the Graduation Examination in October 1895. The subjects of the Essays to be set will be taken from the following branches of Law :—

(1.) "*Mare Liberum* and *Mare Clausum.*"
(2.) The Roman Law of Sale.
(3.) The Constitution from 1688 to 1832.

No. IV. will be offered for competition on the third Monday, Tuesday, and Wednesday in October 1895, beginning at 10 A.M. each day. Names to be entered on or before 28th September. The subjects prescribed are :—

(1.) History of Great Britain from 1714 to 1820.
(2.) History of Scotland from 1603 to 1746, both years included.
(3.) History of Rome from 88 B.C. to 14 A.D.
(4.) History of France under Louis XIV.

No. III. of the above Scholarships will be offered for competition after the conclusion of the Graduation Examinations in October 1896.

The subjects of the Essays to be set for this Scholarship will be taken from the following branches of Law:—

(1.) The Law of Succession and Trust.
The History of Criminal Procedure.
(2.) The Law of Heritable Securities.
The Law of Entails.

II.—Bursaries.

The subjects of examination for first-year Bursaries are Latin and Moral Philosophy, and are the same as the October Examinations in these subjects for M.A.

1, 2, 3. *Three Grierson Bursaries*, value £26, 13s. 4d. each, restricted in the first place to natives of the parishes of Crawford and Leadhills, and tenable for three years, whom failing they will be tenable for one year. One will be open to Students beginning their first Winter Session, one to Students beginning their second Winter Session, and one to Students beginning their third Winter Session (see general rule as to application, *sup.*).

3. The *Cairns Bursary*, value £18, 19s. 6d., tenable for one year (see general rule, *sup.*).

4. The *Sibbald Bursaries*, No. XLIV., page 337. Apply to Messrs Mackenzie, Innes & Logan, 23 Queen Street, Edinburgh.

5. A *Thomson Bursary*, of £25 a year, tenable for four years. Candidates must be Matriculated Students commencing their First Winter Session in the Faculty of Law, and must intimate their intention to compete to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, the Agents for Dr Thomson's Trustees, and also to the Clerk of the Senatus on or before 1st October. Candidates of the name of Thomson or Traquair, or natives of the town or county of Dumfries or the city of Edinburgh, are preferred.

6. *Renton Bursary*, No. LXII., page 340. The examination is in English and Elementary Mathematics, and will take place on Saturday, November 2nd, at 10 o'clock. Names of Candidates to be entered at the Matriculation Office, on or before 25th October.

III.—Prizes.

1. The *Forensic Prize* of £10 is awarded annually, either for the best Essay upon a subject prescribed by the Professor of Civil Law, or as the result of a special examination held either in July or October. It can be competed for only by Students who have attended the Civil Law Class during the preceding year. The subject of Essay or date of Examination, as the case may be, is announced by the Professor early in the session.

2. The *Muirhead Prize*, of about £17, 10s. annually, is awarded to the Student who gains the first place in the Class of Civil Law, as determined by the results of the periodical examinations during both the Winter and Summer Sessions.

3. The *William Dickson Travelling Fund.* See page 358.
4. The *Lord Rector's Prize.* See No. 2, page 361.
5 and 6. *The Trustees of Gray Prizes.* See Nos. 7 and 8, page 362.

The attention of all Bursars in the Faculty of Law is particularly called to the following Regulation:—

"Bursars connected with the Faculty of Law must annually attend and perform the work of at least one Class in the Faculty.

"Each Bursar must present a Certificate, signed by the Dean, attesting his regular attendance, &c., on each occasion on which he applies to the Factor for a payment."

Certificates, in terms of this regulation, will be given to Bursars by the *Dean of the Faculty of Law* after the 13th November; also at the end of the Session in April. In applying to the Dean for the Certificate in November, Bursars must present to him their Class Cards for the Session, as evidence that they have enrolled in their classes; and at the end of the Session they must present to him certificates from the Professors to the effect that they have attended with regularity and have performed the work of the Class. Payments are made by the Factor for the University, Mr Henry Cook, W.S., 61 North Castle Street, Edinburgh, on and after 14th November for the Martinmas payments, and on and after 18th May for the Whitsunday payments,—between 10 and 3 o'clock.

N.B.—*Bursars and Scholars who desire to resign should at once announce this to the Factor. They must apply to the Factor for the instalments due to them within three months after they have become payable, otherwise they will be regarded as having resigned.*

L. J. GRANT, Bart., B.A.,
Dean of the Faculty of Law.

V.

FACULTY OF MEDICINE.

1895-96.

Dean.

PROFESSOR THOMAS R. FRASER, M.D., LL.D., F.R.S.,
University New Buildings.

Programme of Classes.

—o—

FACULTY OF MEDICINE.

WINTER SESSION, 1895-96.

Students who do not intend to graduate in Medicine in this University may attend any of the Classes in the Faculty on payment of the Matriculation and Class Fees. Those who intend to graduate in this University must pass the Preliminary Examination before attendance on any Class will qualify for Graduation.

The Classes in the Faculty of Medicine will be opened on Tuesday, 15th October. They will meet daily (Saturdays excepted), unless otherwise stated.

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees.
Medicine	15 Oct., 9 o'cl.	Professor Sir T. Grainger Stewart, ...	£4 4
Chemistry	15 Oct., 10 ,,	Prof. Crum Brown	4 4
Chemistry—Advanced Course	3 Dec., 4 ,,		2 2
Practical Chemistry	2 Dec., 11 and 2 o'cl.		3 3
Surgery	15 Oct., 11 ,,	Prof. Chiene, ...	4 4
Physiology or Institutes of Medicine	15 Oct., 10 ,,	Prof. Rutherford,	4 4
Practical Physiology	16 Oct., 1 ,,		3 3
Do. (Advanced[1])...	21 Oct., 11 ,,		3 3
Midwifery & Diseases of Women & Childr.	15 Oct., 10 ,,	Prof. Simpson, ...	4 4
Clinical Surgery[3]—Royal Infirmary, *Mon. & Thurs.*	17 Oct., 12 ,,	Prof. Annandale,	4 4[2]
Clinical Medicine[3]—Royal Infirmary, *Tues. & Fri.* ...	15 Oct., 12-2 o'clock	Professors Sir T. Grainger Stewart, Fraser, and Greenfield; and Simpson on Diseases of Women, ...	4 4
Clinical Instruction in the Royal Infirmary	11 *daily.* . .	The Clinical Professors	Hospital Ticket.[4]

[1] This Class meets for two hours twice a week throughout the Winter Session only.

[2] Nine months ticket, if taken primarily, £6, 6s., this to rank as a perpetual ticket; three months ticket after a six months ticket has been taken, £3, 3s.; three months ticket if a primary entry, £3, 3s.; if a second three months is asked for, £2, 2s; if a third three months is asked for, £2, 2s.

[3] Only open to Students holding the Hospital Ticket.

[4] For Fees, see page 586.

WINTER SESSION—*continued.*

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees.
Anatomy	15 Oct., 1 o'cl.	Prof. Sir William Turner,	£4 4
Practical Anatomy	1 Oct., *daily*		3 3
Anatomical Demonstrations (Regional Anatomy)[1]	15 Oct., 4 o'cl.	David Hepburn, M.D.,	2 2
Materia Medica	15 Oct., 2 ,,	Prof. Fraser,	4 4
Pract. Mat. Medica, includ. Pharmacy	16 Oct., 10 ,,		3 3
Experimental Pharmacology[6]	7 Jan., ,,	Joseph Tillie, M.D.	3 3
Pathology	15 Oct., 3 o'cl.	Prof. Greenfield,	4 4
Practical Pathology	16 Oct., *daily*		3 3
Pathological Bacteriology[6]		Robert Muir, M.D.	3 3
Zoology (Elementary)[2]	15 Oct., 12 o'cl.	Prof. Ewart,	4 4
Do. (Elementary Practical)[2]	15 Oct., ,,		2 2[3]
Do. (Advanced)[2]	15 Oct., 1.30, ,,		3 3[3]
Vertebrate Morphology (with Laboratory Work)	15 Oct., 2 ,,	John Beard, D.Sc.	3 3
Comparative Embryology[6]	14 Jan., 2 ,,		3 3[6]
Physics[2]	15 Oct., 3 ,,	C. G. Knott, D.Sc.	3 3
Advanced Botany[2]	15 Oct., 11 ,,	Prof. B. Balfour,	2 2[4]
Prac. Bot. (Advanced)[2]	15 Oct., 11 ,,		3 3[4]
Medical Jurisprudence and Public Health	*Given in Summer Session*	Prof. Sir Douglas Maclagan,	4 4
Public Health Lectures	24 Jan., 3 o'cl.		0 0[5]
Mental Diseases, with Clinical Instruction at Morningside Asylum	*Given in Summer Session*	T. S. Clouston, M.D.,	3 3[6]
Diseases of the Eye	*Given in Summer Session*	D. Argyll Robertson, M.D.	3 3[6]
Clinical Instruction on Diseases of Children at Royal Hospital for Sick Children	19 Oct., 12 noon.	Jas. Carmichael, M.D., John Playfair, M.D.,	1 1[6]

The Fee for a Second Course of any of the Lectures is £3, 3s.; any subsequent course is free. If a Perpetual Ticket is taken out at the beginning of the First Course, the Fee is £6, 6s.

[1] When taken along with Practical Anatomy, £1, 1s. [2] Three Months' Course.
[3] Besides charge of 10s. for Laboratory Expenses. [4] Besides Garden Fee of 5s.
[5] Open to Members of Medical Jurisprudence Class, 1895.
[6] Five Shillings University Entrance-Fee for Non-Matriculated Students.

SUMMER SESSION, 1896.

The Classes will be opened as follows, and will meet daily (Saturdays excepted), unless otherwise stated.

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees.
Elementary Botany.....	5 May, 8 o'cl.	Prof. Bayley Balfour,	£4 4[1]
Practical Botany.....	5 May, 9 ,,		2 2[1]
Field Demonstrations on *Saturdays*.			
Physics	5 May, 12 ,,	Prof. Tait, ...	3 3
Medical Jurisprudence and Public Health...	5 May, 10 ,,	Prof. Sir Douglas Maclagan,	4 4[5]
Zoology (Elementary Practical).	5 May, 2 ,,	Prof. Ewart,	2 2[2]
Zoology of Invertebrata (Intermediate course)			2 2
Zoology (Elementary)..	5 May, 1 ,,	John Beard, D.Sc.	4 4
Zoology—Invertebrate Morphology, with Laboratory Work....	5 May, 3 ,,		3 3[2]
Prac. Materia Medica (incl. Pharmacy).....	5 May, 10 ,,	Prof. Fraser,....	3 3
Chemistry (Practical)..	5 May, 2 ,,	Prof. Crum Brown,	3 3
Do. (Organic)....	5 May, 1 ,,		2 2
Practical Anatomy.....	5 May, *daily*.	Prof. Sir W. Turner and Demonstrators.	2 2
Anthropology—(*Tues., Wed., Fri.*)	5 May, 2 o'cl.		2 2[3]
Anatomical Demonstrations (Regional Anatomy)	5 May, 11 *daily*.	David Hepburn M.D.	
Clinical Surgery,[4] Royal Infirmary (*Mon. & Thurs.*).....	7 May, 12 ,,	Prof. Annandale,	3 3
Clinical Medicine,[4] Royal Infirmary (*Tues. & Fri.*)	5 May, 12 to 2	Professors Sir Thos. Grainger Stewart, Fraser and Greenfield; and Prof. Simpson on Dis. of Women.	3 3
Clinical Instruction in the Royal Infirmary..	12 *daily*. . .	The Clinical Professors.	Hospital Ticket.

[1] Besides Garden Fee of 5s.
[2] Besides charge of 10s. for Laboratory Expenses.
[3] When taken with Practical Anatomy, £1, 1s.
[4] Only open to Students holding the Hospital Ticket.
[5] For a Second Course, £3, 3s.

SUMMER SESSION—*continued.*

Classes.	Days of Opening and Hours of Lectures.	Professors and Lecturers.	Class Fees.
Obstetrical and Gynecol. Operations—(*Tues. & Fri.*)	5 May, 10 o'cl.	Prof. Simpson,	£3 3
Practical Physiology, including Histology....	5 May, 3 o'cl.	Prof. Rutherford,	3 3
Do. (Advanced)...	*In Winter only.*		3 3
Operative Surgery and Surgical Appliances	13 April.....	Prof. Chiene, ...	3 3
Practical Morbid Anatomy and Pathology	5 May, 11 o'cl.	Prof. Greenfield,	3 3
Mental Diseases, with Clinical Instruction at Morningside Asylum (*Mon. Wed. & Frid.*)	6 May, 3 o'clock	Thos. S. Clouston, M.D., ...	3 3[1]
Diseases of the Eye ...	11 May, 9 ,,	D. Argyll Robertson, M.D.,	3 3[1]
Clinical Instruction on Diseases of Children, at Royal Hospital for Sick Children..... (*Tues. and Sat.*)...	5 May, *Tues.* 10.30. *Sat.* 12.0.	James Carmichael, M.D., John Playfair, M.D., ...	1 1[1]

[1] Five Shillings University Entrance-Fee for Non-Matriculated Students.

ROYAL INFIRMARY.

Royal Infirmary at Eleven *daily*.—Perpetual Ticket, in one payment, £12; Annual Ticket, £6, 6s.; Six Months, £4, 4s.; Three Months, £2, 2s. Separate payments, amounting to £12, 12s., entitle to a Perpetual Ticket.

MATRICULATION.

Students are required to take out their Matriculation Ticket and Class Tickets for each course of Lectures, which they propose to attend, not later than fifteen days after the commencement of the course. Matriculation consists in paying during each year of study an entrance fee to the University, and in inscribing the name in the Students' Album.

All Candidates for Degrees, not Students of the University, availing themselves of the permission to attend the Classes of Extra-Academical Teachers in Edinburgh, must conform to the Regulations, Section VIII., 5, 6, page 617.

The Matriculation Fees, &c., are—

For the Academic Year (1st October to 1st October) .	£1	1	0
For the Summer Session only (1st May to 30th September inclusive), ...	0	10	6
(Candidates entering for Graduation Examinations in Summer, or for Graduation, pay £1, 1s., unless previously matriculated for the whole year.)			
University entrance-fee in lieu of Matriculation for each of certain additional Courses (see Class-Lists), . .	0	5	0

CLASS SESSIONS.

There are Two Sessions in each year, viz. :—

I. The Winter Session, which opens on Tuesday, 15th October 1895, and closes on Friday, 20th of March 1896. Practical Anatomy and Public Health Laboratory work begin on the 1st of October 1895.

The Classes will meet for the last time before the Christmas Vacation on Friday, 20th December 1895, and will reassemble on Tuesday, 7th January 1896.

II. The Summer Session, which opens on Tuesday, 5th May, and closes on 17th July 1896.

LABORATORIES.

The University contains the following Laboratories :—

THE PHYSICAL LABORATORY, established with the view of affording Students a practical knowledge of the construction and use of physical apparatus, and the mode of conducting experimental inquiries, is open daily from 10 to 3, under the superintendence of Professor Tait.

THE BOTANICAL LABORATORY at the ROYAL BOTANIC GARDEN is open daily for the practical study of plants and for research, under the superintendence of the Professor, assisted by James Adam Terras, B.Sc., and J. H. Burrage, B.A.

PHYSIOLOGICAL LABORATORY, for the prosecution of Physiological Research, and for the study of Practical Physiology, open daily, under the superintendence of the Professor, assisted by E. W. Carlier, M.D., C.M., B.Sc., and Gustav Mann, M.D., C.M.

PRACTICE OF PHYSIC LABORATORY, for the study of Medicine, and for research in connection with the Practice of Physic, open daily,

under the superintendence of the Professor, assisted by Robert A. Fleming, M.A., M.B., C.M.

Dissecting Rooms, open daily under the superintendence of Professor Sir William Turner, assisted by David Hepburn, M.D.; J. B. Yeoman, M.B., C.M.; and other assistants. Open 1st October 1895, and 5th May 1896.

The Chemical Laboratories (distinct from the Practical Chemistry Room), completed in 1885, contain accommodation for forty Students. The Laboratories are fitted with all necessary apparatus for chemical analysis and research, open daily, under the superintendence of the Professor, assisted by Leonard Dobbin, Ph.D.; Hugh Marshall, D.Sc.; and A. Forbes Watson, B.Sc.[1]

Obstetrical and Gynecological Laboratory, for research and study of practical work, under the superintendence of the Professor, assisted by J. Clarence Webster, B.A., M.D.

Tutorial Class of Clinical Medicine, in the Wards of the Royal Infirmary, by Joseph Tillie, M.D.; Robert A. Fleming, M.A., M.B., C.M.; Harry Rainy, M.A., M.B., C.M.; under the superintendence of the Clinical Professors.

Natural History Laboratories, for study of the structure and development of Invertebrate and Vertebrate forms, open daily, under the superintendence of the Professor, assisted by J. Beard, D.Sc., Ph.D., and Gregg Wilson, M.A., B.Sc., Ph.D.[2]

Materia Medica Laboratories, for the study of Practical Materia Medica and Practical Pharmacy, and for Pharmacological and Pharmaceutical research, open daily, under the superintendence of the Professor, assisted by Joseph Tillie, M.D., and William C. Sillar, M.B., C.M., B.Sc.

Tutorial Class of Clinical Surgery and Surgical Pathology, in the Infirmary, by A. Logan Turner, M.D., C.M., F.R.C.S.E., and the Resident Surgeons, under the superintendence of the Clinical Professor.

Public Health Laboratory, for Hygienic investigation, comprises three departments, viz.: a Chemical, a Bacteriological, and a Meteorological Department, open daily, under the superintendence of the Professor, assisted by Charles Hunter Stewart, M.B., C.M., D.Sc., and J. Buchanan Young, M.B., C.M., D.Sc. Opens 1st October 1895 and 5th May 1896.[2]

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[1] Fees for Chemical Laboratory: *Whole day*—Winter Session, £10, 10s.; Oct.-Dec., Jan.-March, or Summer Session, £5, 5s. *Half day*—Winter Session, £6, 6s., Oct.-Dec., Jan.-March, or Summer Session, £3, 3s. Preference wil be given to Students in the above order. Students who are not Matriculated may attend the Chemical Laboratory on payment of the Entrance Fee of 5s., in addition to the Laboratory Fee.

[2] Fees—Winter Session, £10, 10s.; Summer Session, £6, 6s.

Surgical Laboratory, divided into two parts—(*a*) General Surgical Pathology, (*b*) Bacteriology,—is utilised for teaching Systematic Surgery, and every facility is afforded for investigation, under the superintendence of the Professor, assisted by Harold J. Stiles, M.B., C.M., F.R.C.S.E.

Pathological Laboratory, for the study of Pathological Anatomy and for Pathological Research, including Histological and Bacteriological Departments, under the superintendence of the Professor, assisted by Robert Muir, M.A., M.D., and D. A. Welsh, M.A., B.Sc., M.B., C.M.

The Royal Edinburgh Asylum is open to members of the Class of Mental Diseases for Practical Instruction, under the superintendence of the Physician-Superintendent.

Practical Instruction in the use of the Ophthalmoscope and in the detection of errors of refraction is given to members of the Class of Diseases of the Eye at the Eye Wards of the Royal Infirmary, under the Superintendence of the Lecturer.

GENERAL MEDICAL COUNCIL REGISTRATION OF STUDENTS OF MEDICINE.

According to the Regulations of the General Medical Council of the United Kingdom, all Medical Students must register in the Medical Students' Register of the General Medical Council within fifteen days after the commencement of Medical Study, and should not neglect this requirement. Forms of application and full information regarding Registration may be obtained from James Robertson, Registrar of the Branch Council for Scotland, 1 George Square, Edinburgh, or at the Office of the Faculty of Medicine.

MINIMUM CURRICULUM FOR THE DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY, WITH SUGGESTED ORDER OF STUDY AND EXAMINATION.

Before beginning Medical Study, all students must pass the Preliminary Examination in General Education, either at the University, or, if elsewhere, according to the requirements of the University. Immediately after entering on Medical Study, students must register in the books of one or other of the Registrars of the General Medical Council. The Registrar for Scotland is Mr James Robertson, 1 George Square, Edinburgh, from whom forms of Registration and all information on the subject may be obtained.

Medical Study may be begun either in October (Winter Session) or May (Summer Session), and must be engaged in for at least five years.

A.—*For Students beginning in Winter.*

FIRST WINTER SESSION.
- Chemistry, including Practical Chemistry.
- Physics,[1] or Elementary Zoology.
- Anatomy (Lectures).
- *Examination in Chemistry, including Practical Chemistry, and either Physics or Elementary Zoology.*

FIRST SUMMER SESSION.
- Elementary Zoology or Physics.[1]
- Elementary Botany.
- *Examination in Elementary Botany and Elementary Zoology or Physics.*

SECOND WINTER SESSION.
- Practical Anatomy.
- Physiology.
- Surgery.

SECOND SUMMER SESSION.
- Practical Physiology.
- Practical Materia Medica.
- Clinical Surgery (with Dressership).
- Hospital.

THIRD WINTER SESSION.
- Materia Medica.
- Practical Anatomy.
- Clinical Surgery (with Dressership).
- Hospital.
- *Examination in Anatomy, Physiology, and Materia Medica and Therapeutics* (the last may be postponed to the end of the following summer).

THIRD SUMMER SESSION.
- Practical Pathology.
- Medical Jurisprudence and Public Health.
- Clinical Medicine.
- Hospital.
- *Examination in Materia Medica and Therapeutics* (if not previously taken).

FOURTH WINTER SESSION.
- Pathology.
- Medicine.
- Midwifery and Diseases of Women and Children.
- Clinical Medicine (with Clerkship).
- Hospital.
- *Examination in Pathology, and in Medical Jurisprudence and Public Health* (the latter may be postponed to the end of the following summer).

FOURTH SUMMER SESSION.
- *Examination in Medical Jurisprudence and Public Health* (if not previously taken).

FOURTH SUMMER AND FIFTH WINTER SESSION.
- Clinical Medicine.
- Clinical Surgery.
- Mental Diseases.
- Ophthalmology.
- Post-mortem Examinations.
- Fevers.
- Diseases of Children.
- Out-practice of an Hospital, Dispensary, &c.
- Midwifery Cases and Practice.
- Vaccination.
- Hospital.

FIFTH SUMMER SESSION.
- *Examination in Surgery and Clinical Surgery, Medicine and Clinical Medicine, and Midwifery.*

[1] Three months' course.

B.—*For Students beginning in Summer.*

FIRST SUMMER SESSION.
- Elementary Botany.
- Physics.[1]
- *Examination in Elementary Botany and Physics.*

FIRST WINTER SESSION.
- Chemistry, including Practical Chemistry.
- Elementary Zoology.
- Anatomy (Lectures).
- *Examination in Chemistry, including Practical Chemistry and Elementary Zoology.*

SECOND SUMMER SESSION.
- Practical Anatomy.
- Practical Physiology.

SECOND WINTER SESSION.
- Physiology.
- Surgery.
- Practical Anatomy.

THIRD SUMMER SESSION.
- Practical Anatomy.
- Practical Materia Medica.
- Clinical Surgery (with Dressership).
- Hospital.

THIRD WINTER SESSION.
- Practical Anatomy.
- Materia Medica.
- Clinical Surgery (with Dressership).
- Hospital.
- *Examination in Anatomy, Physiology, and Materia Medica and Therapeutics* (the last may be postponed to the end of the following summer).

FOURTH SUMMER SESSION.
- Practical Pathology.
- Medical Jurisprudence and Public Health.
- Clinical Medicine.
- Hospital.
- *Examination in Materia Medica and Therapeutics* (if not previously taken).

FOURTH WINTER SESSION.
- Pathology.
- Medicine.
- Midwifery and Diseases of Women and Children.
- Clinical Medicine (with Clerkship).
- Hospital.
- *Examination in Pathology, and Medical Jurisprudence and Public Health* (the latter may be postponed to the end of the following summer).

FIFTH SUMMER SESSION.
- *Examination in Medical Jurisprudence and Public Health* (if not previously taken).

FIFTH SUMMER AND FIFTH WINTER SESSION.
- Clinical Medicine.
- Clinical Surgery.
- Mental Diseases.
- Ophthalmology.
- Post-mortem Examinations.
- Fevers.
- Diseases of Children.
- Out-Practice of an Hospital, Dispensary, &c.
- Midwifery Cases and Practice.
- Vaccination.
- Hospital.
- *Examination in Surgery and Clinical Surgery, Medicine and Clinical Medicine, and Midwifery.*

[1] Three months' course.

Courses of Lectures, &c.

1895-1896.

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I. BOTANY.

PROFESSOR BAYLEY BALFOUR.

Winter Session, 1895.

LECTURES.—A three months' course of Advanced Lectures and an Advanced Course in Practical Botany will be given in the Winter Session.

Summer Session, 1896.

1. LECTURES.—The course is a general one—Morphological, Physiological, and Taxonomic. Lectures are given every Monday, Tuesday, Wednesday, Thursday, and Friday. In addition, lectures on special parts of the subject are given at intervals during the Session.

2. PRACTICAL CLASS.—In this class opportunity is given for the examination of microscopic structure of plants, and for the study of life-histories of plants illustrating the lectures. It is conducted by the Professor, and Assistants.

3. EXCURSIONS. — Excursions are made on Saturdays for the practical study of plants in the fields.

The Royal Botanic Garden, with the Botanical Museum and Herbarium, are open daily for the examination of living as well as preserved specimens of plants.

PLANT PHYSIOLOGY.

W. G. SMITH, B.SC., PH.D., *Lecturer*,

For Synopsis, see Faculty of Science.

II. NATURAL HISTORY.

PROFESSOR EWART.

1. Lectures on Zoology.

Winter Session.—The first part of the course will treat of the Principles of Biology as illustrated by the Life-History, Morphology, and Physiology of one of the Vertebrata. The Distinctive Characters of the Chordata, and the structure, habits, &c., of a series of vertebrate types will next be considered. The rest of the course will be chiefly devoted to a consideration of (1.) The leading types of Invertebrates. (2.) The structure and life-history of the more important animal parasites, and (3.) The elements of Embryology, Classification, and Geographical Distribution of Animals.

Summer Session.—An Elementary Course, qualifying for the First Professional and the First B.Sc. Examinations, and *pro tanto* for graduation in Arts, will also be given during the Summer Session 1896.

2. Elementary Practical Zoology.

Winter and Summer Sessions.—In this Class Students have the opportunity of studying practically the more important types described in the Lectures, amongst others: — Amœba, Paramœcium, Hydra, Hirudo, Arenicola, Helix, Astacus, Raia, Rana, Columba, and Lepus.

3. Advanced Courses.

The Advanced Courses consist of Lectures and Laboratory work, and are intended to assist students in their preparation for the Degree of B.Sc. in Zoology.

An Intermediate Course of Lectures will be held during the Summer Session, and will be devoted to an account of the Systematic Zoology of the Invertebrata. This class is prescribed for the Second B.Sc. Examination in Zoology and Comparative Anatomy.

During the first half of the Winter Session an Advanced

Course of Lectures will be given on the Comparative Morphology of the Vertebrata. (See Faculty of Science).

The Laboratory work will extend over the first half of the Winter Session and the Summer Session.

RESEARCH WORK.—The Laboratories will also be available during both Sessions for research. Students desiring to be admitted for this purpose should apply to the Professor. No Laboratory fees will be charged for such Students.

COMPARATIVE EMBRYOLOGY.

VERTEBRATE MORPHOLOGY.

J. BEARD, D.SC.

For synopses, see under "Faculty of Science."

III. CHEMISTRY.

PROFESSOR CRUM BROWN.

1. LECTURES—In the Lectures the general laws of chemical action are explained and illustrated.

The chief non-metallic elements and their more important compounds are discussed in detail. The metals and the different series of metallic salts are considered more generally, details being given in the case of the more important substances.

The principles upon which the classification of organic substances is based are explained, and the properties of the chief groups illustrated by means of examples.

Tutorial Classes, meeting once a week, are conducted by Dr Dobbin.

A course of 50 lectures on Organic Chemistry is delivered in Summer.

A Class for Advanced Students is held in Winter. The subject for the Winter of 1895-96 will be Solution and Electrolysis.

2. LABORATORY.—In the Laboratory, Students who can devote several hours each day to work, are taught Chemical Analysis (including Mineral Analysis, Organic Analysis, and Gas Analysis), the preparation of chemical substances, and the

examination and determination of their properties. Students who are sufficiently advanced in such practical work may engage in the investigation of chemical problems under the superintendence of the Professor and the chief assistant.

[For details in reference to the HOPE PRIZE SCHOLARSHIPS, which are attached to the Laboratory; and the ROBERT WILSON MEMORIAL PRIZE, which is attached to the Class of Chemistry, see under University Scholarships and Prizes in Faculty of Medicine.]

3. PRACTICAL CLASSES.—The work of these classes consists in the study of the reactions of the commoner Salts.

Students who have worked for at least three months in the Chemical Laboratory do not require to attend the class of Practical Chemistry before appearing for the First Professional Examination for Degrees in Medicine, or for the First B.Sc. Examination, or for Examination in Chemistry for M.A. Degree.

IV. PHYSICS.

PROFESSOR TAIT.

CARGILL G. KNOTT, D.SC., *Lecturer.*

The subjects embraced in the Course of Physics are the following:—

1. Properties of Matter—including Inertia, Gravitation, Molecular Forces, &c.

2. Abstract Dynamics—including Kinematics and Newton's Laws of Motion, with their consequences as regards Statics and Kinetics of Solid, Liquid, and Gaseous Bodies, with the Physical Measurement of Time.

3. Sound, and Wave-propagation in general, Intensity, Pitch, and Quality of Musical Sounds, Harmonics, Concords, &c.

4. Heat, its Nature, Effects, Measurement, Transference, and Transformations—Measurement of Temperature and of Absolute Temperature; Thermo-dynamics.

5. Light (1) Geometrical Optics, Speed of Light, Laws of Reflection and Refraction; Construction and Effects of Mirrors, Prisms, Lenses, and Microscopes; Images, Conditions of

Distinct Vision; (2) Physical Optics, Interference, Dispersion, Diffraction, Double Refraction, Polarization, Spectrum Analysis.

6. Electricity, including Frictional and Voltaic Electricity, Thermo- and Magneto- Electricity, Electro-Dynamics, and Magnetism, with their practical applications. Measurements of Potential, Electromotive Force, Current, &c., Batteries, Dynamos, Electrometers, Galvanometers, Voltameters, &c.

V. ANATOMY.

PROFESSOR SIR WILLIAM TURNER.

Winter Courses.

1. LECTURES ON ANATOMY, at 1 P.M.—It is intended in this Course of Lectures to bring before the Student, in a systematic manner, the structure of the Human Body. The different systems and organs will be described, both in the more obvious arrangements and relations of parts which can be examined by the naked eye, and in their more minute or microscopic structure. The Course includes, therefore, both Textural or General Anatomy and Descriptive Anatomy. The Lectures are illustrated by recent dissections, by wet and dry preparations, by a large collection of Osteological specimens, and by drawings and diagrams. Structures too minute to be recognised by the naked eye are demonstrated under the Microscope.

To assist the Junior Members of the Lecture Class to acquire a knowledge of Osteology, Tutorial Demonstrations on the bones will be given during the earlier months of the Session without additional fee. All the members of this class have access to a systematically arranged series of osteological specimens and of models. Written Examinations for both Junior and Senior Students are held periodically during the Session.

Text-Books—Gray's "Anatomy," or Wilson's "Anatomy." Quain's "Elements of Anatomy." Holden's "Osteology."

2. PRACTICAL ANATOMY, under the superintendence of the Professor, aided by the Demonstrators, David Hepburn, M.D., C.M., J. B. Yeoman, M.B., C.M., and by several other assistants. Examinations of both Junior and Senior Students on dissected parts are regularly conducted by the Demonstrators and the Professor. Special tutorial Demonstrations will also be given to the Senior Students on the joints, the brain, the organs of special sense, and other viscera.

This Course will commence on Tuesday, October 1st. The Dissecting-rooms are open from 9 A.M. to 5 P.M., and on Saturdays from 9 A.M. to noon. The Mackenzie Bursaries are awarded to members of this Class for proficiency in dissection.

Text-Books.—"Demonstrations of Anatomy," by Ellis, or Heath's "Practical Anatomy," or Holden's "Manual of the Dissection of the Human Body," or Cunningham's "Manual of Practical Anatomy."

ANATOMICAL DEMONSTRATIONS (REGIONAL ANATOMY).

DAVID HEPBURN, M.D., *Lecturer.*

In this Course, which is conducted in the Theatre, the structure of the human body is displayed and demonstrated topographically, from the surface inwards.

Summer Courses.

PRACTICAL ANATOMY.

PROFESSOR SIR WILLIAM TURNER.

This Course is the same as in Winter. The Rooms are open from 9 A.M. to 5 P.M.; on Saturdays from 9 A.M. to noon. Examinations are regularly conducted on dissected parts by the Professor and by the Demonstrators, David Hepburn, M.D., C.M., J. B. Yeoman, M.B., C.M., and other assistants, and the joints, brain, and organs of sense will be specially demonstrated.

Anatomical Demonstrations (Regional Anatomy).

DAVID HEPBURN, M.D., *Lecturer.*

This Course is open, without additional Fee, to those engaged in Practical Anatomy during the Summer, and will consist of demonstrations on some special departments of Anatomy.

VI. INSTITUTES OF MEDICINE OR PHYSIOLOGY.

PROFESSOR RUTHERFORD.

This Course, consisting of 100 Lectures, is held in the Winter. It includes an account of—

1. The Structure, Composition, and Functions of the Tissues of the Body.
2. The Nutrition of the Body, including Circulation, Respiration, Alimentation, Nutrition of the Tissues, Excretion, together with the minute structure of the organs concerned.
3. Animal Heat.
4. Voice and Speech.
5. The minute structure and physiology of the Sense organs, and the special physiology of the Nervous System.
6. Reproduction and Development.

There is a printed Syllabus with short notes of the Lectures.

Practical Physiology.

This Course is divided into three sections—

1. *Practical Histology*, in which every Student prepares, examines, and preserves for himself most of the tissues and organs of the body. Each student is provided with a microscope, and all reagents.

2. *Practical Chemical Physiology*, in which every student performs the qualitative and quantitative analysis of the Urine in its normal and abnormal conditions, with special reference to clinical work, and such practical work at the Chemistry of Proteids and Carbohydrates, Blood, Milk, Bile, and Diges-

tion, as is possible in a class. There is a printed Syllabus with short notes of this section of the Course.

The above sections of the class are held both in the Winter and Summer Sessions. In each session the class meets sixty times.

3. *Demonstrations of Physiological Instruments.*—This section of the class is held only in Winter, and is open to all who have attended the other sections of the course.

Advanced Practical Physiology.

See Synopsis under Faculty of Science.

Physiological Research.

The Physiological Laboratory is open daily for the prosecution of Physiological Research. Application must be made to the Professor.

VII. MATERIA MEDICA AND THERAPEUTICS.

PROFESSOR THOMAS R. FRASER.

Materia Medica comprises the subjects of pharmacognosy, pharmacy, pharmacology, therapeutics, and dietetics; and the remedial applications of electricity and galvanism, heat and cold, &c. Instruction in Materia Medica is given in (A) a course of 100 Lectures during the Winter Session, and in (B) Practical Classes during the Summer Session, and of equivalent duration during the Winter Session.

A.—Lectures on Materia Medica and Therapeutics. —This course includes the following among other *Special Topics.*—1. The natural history, sensible and chemical properties, physiological action (or pharmacology), therapeutical uses, and modes of administering remedies, ordinarily so called. Such remedies consist of (*a*) inorganic substances; (*b*) chemical products; (*c*) vegetable substances; (*d*) animal substances. 2. Food and drink, considered generally and in reference to disease. 3. Electricity and galvanism, with a description of the apparatus required for their application in disease. 4. Heat and cold. 5. Climate. In each course of

Lectures the subjects included in 1 will be fully discussed, but a selection only will be made from the subjects included in 2, 3, 4, and 5, according to the time that may be left for their consideration.

B.—Practical Classes.—In these classes, *practical* instruction is given in the following subjects embraced in Materia Medica, but which cannot satisfactorily be taught in a course of lectures :—1. Pharmacy, or the processes for obtaining the pharmaceutical preparations of drugs. 2. Prescription-writing. 3. Dispensing, or the making up of medicines in forms suitable for administration in disease.

It is recommended that the Practical Class be attended before the course of lectures on Materia Medica and Therapeutics. Practical classes are taught during the Summer Session, when they meet daily at such hours as are found most convenient. A winter class will also be formed in October.

Research Laboratories.

The above laboratories will be open daily for research on the pharmacological action and chemical composition of medicinal substances, under the superintendence of the Professor and his assistants. Application to be made to the Professor.

Experimental Pharmacology.

JOSEPH TILLIE, M.D., *Lecturer.*

The Class meets for two hours twice weekly throughout the Summer Session. Fee, £3, 3s.

The Course consists of Practical Work in the Laboratory, comprising—1. The Experimental Methods employed in Pharmacological Research. 2. The Experimental Study of the Pharmacological (or Physiological) Action of Medicinal Substances.

The Course is adapted for Students who desire a Practical knowledge of Pharmacology, and for the training of Students and Graduates for Pharmacological Research.

VIII. PATHOLOGY AND MORBID ANATOMY.

PROFESSOR GREENFIELD.

This Course includes General Pathology, General Pathological Anatomy and Histology, and Systematic Morbid Anatomy.

The subjects are treated mainly in the following order—

1. General Pathology (including General Pathological Anatomy), *i.e.*, the study of the processes of disease, as to their causation, phenomena, physiological and physico-chemical relations and characters. Under this head are considered Degenerative Processes, Inflammation, Repair, Morbid Growths, &c.

2. General Etiology is treated in fuller detail with reference to Parasitic and Infective Diseases, and includes Bacteriology and methods of bacteriological research.

3. Systematic Morbid Anatomy and Histology—a study of the more important diseases of the principal systems and organs of the body, especially in relation to structural and physical alterations.

In illustration of the lectures, in addition to plates, diagrams, &c., there are frequent naked eye and microscopic demonstrations of recent specimens, of preparations from the University Anatomical Museum and from the Professor's private collection —and also demonstrations of apparatus, photographs, sections, &c., by the limelight, and in other ways.

Practical Pathology.

Classes for Practical Instruction in Morbid Anatomy and Pathological Histology are conducted in the Pathological Laboratory—microscopes and other necessary apparatus being supplied. The Course consists of—1st. Naked Eye Demonstration; 2nd. Histological investigation and preparation of Morbid Structures and Organs; 3rd. Elementary Bacteriology.

For the Winter Course, the class meets five times a week, from the beginning of the Session till the end of January. For

the Summer Course, five times a week, from the beginning of May till the end of July.

The Laboratory is also open daily from 10 A.M. till 4 P.M. for Pathological Research, under the direction of the Professor and his Assistants.

Pathological Bacteriology.

ROBERT MUIR, M.D., *Lecturer.*

The Course is a practical one, and consists of Laboratory Instruction, Demonstrations, and Lectures. The subjects may be arranged thus :—(a) *General.*—Morphology and Life History of Micro-organisms ; Preparation of Culture Media ; Methods of Isolation and Cultivation, including Anaerobic Cultures ; Methods of Staining ; Separation of Bacterial Products ; Inoculation, &c.

(b) *Special.*—A Systematic Study of Organisms Pathogenic to the Human Subject—their characters, their modes of producing disease, &c. A number of the more important non-pathogenic organisms are also studied.

Fee for the Course, £3, 3s.

The Course is given in the Winter Session, but may also be given in Summer.

IX. PRACTICE OF PHYSIC.

PROFESSOR SIR THOMAS GRAINGER STEWART.

This Course comprises—

I. An account of the nature, and more particularly of the clinical characteristics, and the treatment of the different types of morbid action.

II. An account of the morbid anatomy, clinical history, causes, diagnosis, prognosis, and treatment of the diseases of the different systems and organs.

It is intended that each course shall be, as far as possible, complete ; but that, while the general principles (included in Part I.) shall be fully discussed each session, the diseases of individual systems (included in Part II.) shall be taken up in

different order year by year, and certain systems selected for more minute consideration.

The course is illustrated by specimens from the Anatomical Museum of the University, and from the Professor's private collection, as well as by numerous drawings, diagrams, and charts.

TUTORIAL CLASS.

Practical instruction in connection with the Course is given to the members of the Class by the Assistant.

Text-Books.—Fagge's, Bristowe's, Bartholow's, Robert's, Osler's, or Frederick Taylor's "Practice of Medicine." Students are also advised to consult the Professor's "Introduction to the Study of Nervous Diseases," and Dr Graham Brown's, Drs Gibson and Russell's, or Dr Finlayson's works on Medical Diagnosis.

MENTAL DISEASES.

THOMAS S. CLOUSTON, M.D., *Lecturer.*

This course consists of—

1. Systematic Lectures in the University during the Summer Session on the Classification, Symptoms, Causes, and Treatment of Mental Diseases.

2. Pathological demonstrations, naked eye and microscopic, in the University and at the Royal Asylum, Morningside, of the Morbid Anatomy of Insanity. Students will have an opportunity of original investigation in the Pathological Museum of the Asylum, under the Pathologist of the Institution.

3. Clinical instruction at the Royal Asylum, Morningside (West House), in all the forms of Mental Disease. Students have the opportunity of personally coming in contact with and examining the cases, so as to learn the modes of managing and dealing with patients labouring under Mental Disease, and they are exercised in the diagnosis of Insanity and the drawing up of certificates; the aim being to enable them to recognise its early stages, to distinguish its varieties, to adopt suitable treatment, and to advise the relatives as to the question of sending the

patient to an asylum or not. There is a clinical field of 500 beds, comprising all the wards except those for private patients. This part of the course extends through the Summer and the last month of the Winter Session.

4. Instruction in regard to the medico-legal, hereditary, educational, and social relations of Mental Disease, and on its bearings and significance in ordinary medical practice.

There are Free Clinical Clerkships, tenable for three months, in the Royal Edinburgh Asylum, and in several other Asylums, in connection with the class.

Text-Book.—Dr Clouston's "Clinical Lectures on Mental Diseases."

X. SURGERY.

PROFESSOR CHIENE.

Winter Session.

1. *Lectures*, 11 A.M. This course of lectures is devoted to a systematic consideration of the Principles and Practice of Surgery. It is intended that each course shall embrace, as far as possible, a complete view of the present aspects of the Science and Practice of Surgery.

Written examinations are held at stated periods, and at the end of the Session a practical examination is held on the work of the Tutorial Classes.

2. *Tutorial Instruction*, at hours most convenient for the students, includes—

(*a.*) *Practical Instruction* in *Bandaging* and the *Treatment* of *Fractures* and *Dislocations* on the living subject. This class is divided into sections for Senior and Junior Students.

(*b.*) Demonstrations of Surgical Instruments and Appliances.

(*c.*) Weekly Demonstrations on the Surgery of the Eye and Ear and on Surgical Pathology, illustrated by museum specimens.

(*d.*) Weekly Revisal of the Lectures, together with Demonstrations of the Preparations in the Surgical Museum illustrative of the Lectures on Surgery.

(*e.*) Lantern Demonstrations on Surgical Pathology.

Summer Session.

The Summer Session is devoted to a consideration of the Practical Aspects of Surgery. Special attention is given to Surgical Anatomy and Operative Surgery. The class meets during the months of April, May, and June. Oral examinations and tutorial instruction in the Treatment of Fractures and Dislocations, and in the uses of surgical instruments, form a special part of the course. Special demonstrations are given on Surgical Pathology.

The Surgical Laboratory is divided into two departments,—1st, Surgical Pathology; 2nd, Bacteriology. It is open daily for original work during the Winter and Summer Sessions, under the superintendence of the Professor, assisted by Harold J. Stiles, M.B. Applications to be made to the Professor.

Text-Books—Winter Session.—The Professor's "Lectures on the First Principles of Surgery." Keen and White's Text-Book of Surgery. *Summer Session.*—The Professor's "Lectures on Surgical Anatomy," and Joseph Bell's "Manual of Surgical Operations," 1892.

DISEASES OF THE EYE.

D. ARGYLL ROBERTSON, M.D., *Lecturer*

The course will consist—

1. Of systematic lectures delivered daily at 9 A.M. for eight weeks during the Summer Session, at which the symptoms, diagnosis, and treatment of the more important diseased conditions of the eye and its appendages will be discussed. The lectures will be illustrated by drawings, diagrams, &c.

2. Of clinical instruction daily at the Ophthalmic wards of the Royal Infirmary, where opportunities will be afforded for practising the use of the ophthalmoscope. Special practical instruction will be given in ophthalmoscopic affections and errors of refraction.

Text-Books.—Swanzy's "Handbook on Diseases of the Eye," Lawson on "Diseases and Injuries of the Eye," or Nettleship on "Diseases of the Eye."

Works of reference.—Fuchs' "Text-book of Ophthalmology," translated by Duane. Berry's "Treatise on Diseases of the Eye." Meyer's "Practical Treatise on Diseases of the Eye," translated by Fergus. Julius' "Ophthalmic Science and Practice." Landolt on the "Refraction and Accommodation of the Eye," translated by Culver. Gowers' "Medical Ophthalmoscopy."

XI. MIDWIFERY AND THE DISEASES OF WOMEN AND CHILDREN.

PROFESSOR SIMPSON.

The Course of Instruction comprises Lectures on—

I. The Anatomy and Physiology of the Female Organs of Reproduction.

II. The Physiology, Pathology, and Therapeutics of Pregnancy.

III. Parturition—Natural (Eutocia), and Morbid (Dystocia).

IV. The Hygiene, Pathology, and Therapeutics of the Puerperal State.

V. The Hygiene, Pathology, and Therapeutics of Infancy and Childhood.

VI. The Special Pathology and Therapeutics of the Female Organs of Reproduction.

One day in each week is devoted to the Gynecological Section of the Course; and the Diseases of Women may be studied clinically in the Royal Infirmary, in the Buchanan Medical Ward, in connection with the class of Clinical Medicine.

Midwifery may be studied clinically in the Royal Maternity, of which the Professor is, *ex officio*, one of the Medical Officers, and where he is in attendance during the first three months of the Winter Session. The Professor makes a special Clinical visit with the Students, who have taken the Maternity Ticket, on Saturdays, at the usual Lecture hour—10 A.M.; and he or one of the Assistant Physicians gives Clinical Instruction on Wednesday afternoons at 4 P.M.

After the Class-roll is made up, Tutorial classes are formed for

Practical Instruction in the use of Obstetric and Gynecological Instruments and Appliances.

Medals and Certificates of Merit are awarded for answers at three Written Examinations held during the Session.

Summer Session.

A Course of Instruction in Obstetric and Gynecological Operations, with Demonstrations of the use of Instruments and Appliances, is conducted during the Summer Session at 10 A.M.

On Tuesdays and Fridays the Professor gives Lectures and Demonstrations. On the other days of the week the sections of the class are trained in the investigation and treatment of Female Diseases, and the members of the class have an opportunity of practising operations on lay figures.

Text-Books.—Playfair's, Lusk's, or Parvin's "Midwifery." The Professor's "Contributions to Obstetrics and Gynecology." Hart and Barbour's "Manual of Gynecology."

SCHOLARSHIPS IN MIDWIFERY AND GYNECOLOGY.

The Buchanan Scholarship in Gynecology, and the James Scott Scholarship in Midwifery are open to members of the class. For conditions, *see* "SCHOLARSHIPS IN MEDICINE."

CLINICAL INSTRUCTION ON DISEASE IN CHILDREN.

JAMES CARMICHAEL, M.D., JOHN PLAYFAIR, M.D., *Lecturers.*

Two Courses, each of three months' duration, will be conducted annually, one during the Winter Session, and one during the Summer Session.

The instruction is given in the wards of the Royal Hospital for Sick Children. Special attention is directed to Hygiene, Diagnosis, and Treatment during the period of Infancy.

Works of reference.—Keating's "Cyclopædia of the Diseases of Children," Henoch or Eustace Smith on "Disease in Children."

Text-Book. — Carmichael's "Manual of Disease in Children."

XII. MEDICAL JURISPRUDENCE.

PROFESSOR SIR DOUGLAS MACLAGAN.

Part I.—Medical Jurisprudence.

MEDICAL EVIDENCE GENERALLY.

1. Documentary.
2. Oral.
3. Experimental—

   Examination of the living; identity; Examination of the dead; identity; cause of death; exhumations, autopsies.

MEDICAL EVIDENCE SPECIALLY.

Questions affecting Health or Life.

1. Assaults and Homicide—

   Wounds and other external injuries; asphyxia. Starvation. Heat and cold. Poisons.

2. Suicide.
3. Offences against Chastity—

   Rape, &c.; concealment of pregnancy; criminal abortion; infanticide.

4. Malpraxis and Neglect of Duty.

Questions affecting Civil Rights or Social States.

Marriage and Divorce. Impotence and sterility. Live birth. Survivorship. Insanity. Feigned diseases.

Part II.—Medical Police. Public Health.

HYGIENE OF INDIVIDUALS.

Man—

Age and development. Sex. Constitution.

External Agencies—

Food and Drink. Air. Clothing. Ablutions. Exercise.

Habits and Modes of Life—

Temperance. Celibacy and Marriage. Professions: learned, mechanical, criminal. Punishments. Prostitution.

Duration and Expectancy of Life—

Life Assurance.

HYGIENE OF COMMUNITIES.

Sanitary Administration.

Climate—

Causing disease; remedying disease.

Towns, Camps, and Private Habitations—

Topographical position; water supply; heating and lighting; ventilation; drainage and sewerage.

Public Buildings—

Schools; churches; hospitals; theatres; prisons.

Cemeteries. Quarantine Establishments. Epidemics; Endemics. Disinfectants.

Text-Books.—Taylor's "Medical Jurisprudence," Guy's "Principles of Forensic Medicine," Parkes' "Practical Hygiene," Wilson's "Handbook of Hygiene," Louis Parkes' "Hygiene," Wynter Blyth's "Manual of Public Health," Whitelegge's "Hygiene and Public Health," Smith's "Laws Concerning Public Health," Vesey Fitzgerald's "Epitome of the Laws affecting Health," Newsholme's "Vital Statistics," Dykes' and Stuart's "Manual of Public Health Acts."

Public Health Laboratory.

The Laboratory comprises three Departments, the Chemical Laboratory, the Bacteriological Laboratory, and a station for making meteorological observations, and the examination of emanations from the soil.

The Laboratories will be open daily during the Winter and Summer Sessions, from 10 to 4, under the superintendence of the Professor, assisted by Charles Hunter Stewart, D.Sc., M.B., and James Buchanan Young, M.B., D.Sc. (P.H.).

The work in these Laboratories will constitute an advanced course of instruction in the Methods of Hygienic investigation, and is intended for those who may desire to prepare themselves for taking the Degrees of Science in Public Health, or for the duties of Medical Officer of Health.

The Fees are £10, 10s. for the Winter, and £6, 6s. for the Summer Session.

XIII. CLINICAL SURGERY.

PROFESSOR ANNANDALE.

The objects of this Course are to teach the symptoms, diagnosis, and treatment of Surgical diseases and injuries as met with in the living body, and to point out modifications and complications which occur in connection with them. With these views patients are brought before the class in the special University Clinical Theatre of the Infirmary, and their conditions are carefully examined and discussed, due regard being taken to avoid anything likely to injure their feelings or in any way aggravate their disease. The history and nature of the case having been studied, the proper treatment is suggested and described, and is then either carried out at once or on the first convenient occasion. In addition to the regular lectures, operations are performed in the Clinical Theatre, practical instruction at the bedside is given in the wards of the Infirmary, and upon two days in the week the cases of patients attending the out-patient department are specially considered by the Assistant Surgeon, Mr Alexis Thomson, so as to instruct the students in connection with the minor and more common surgical affections. Practical instruction as to the examination of patients, the observation of symptoms, the treatment of surgical emergencies, the use of instruments, the application of dressings, and other surgical details is given by the Clinical Tutor (Dr Logan Turner) attached to the Chair, in small classes, which are free to all Students attending the Course.

Text-Books.—Any of the recent standard works upon Surgery. Students are also advised to study some of the best works (old and new) on the special subjects of Practical Surgery.

In connection with the class of Clinical Surgery, it is to be noted that under the New Regulations—(1.) Nine months' attendance upon Lectures is required, and it is advised that at least six months of this attendance should be continuous. (2.) That attendance at the Ward Cliniques is compulsory and

forms part of the Course. (3.) Students must produce a certificate that they have acted as a Dresser or Clerk in Surgical Wards for six months.

XIV. CLINICAL MEDICINE.

PROFESSORS SIR THOMAS GRAINGER STEWART, FRASER, AND GREENFIELD, WITH PROFESSOR SIMPSON FOR DISEASES OF WOMEN.

The course of Clinical Medicine, consisting of Clinical Lectures and Instruction in the University wards of the Royal Infirmary, is conducted conjointly by the Clinical Professors — all the Professors being on duty during both the Winter and Summer Sessions. the Professor of Midwifery giving lectures and demonstrations on Gynecological Medicine on certain days.

The Course consists of:—1. Practical Instruction on three days a week at the bedside. 2. Critical Expositions and Discussions of cases in the lecture-room on two days a week.

Every facility is afforded to members of the Class to act as Clinical Clerks, and those are preferred who have already had a course of tutorial instruction. At the close of each Summer Session, six gentlemen, who have been members of the Class, are appointed to be Resident Physicians in the Clinical Wards during the following Winter and Summer Sessions.

Clinical Tutorial Class.

Practical instruction in the Methods of Physical Examination is given to the members of the Class by the University Clinical Tutors.

Junior Students are strongly advised to take this course of instruction along with their first course of Clinical Medicine.

Regulations for Graduation in Medicine and Surgery.

A.—APPLICABLE TO ALL WHO COMMENCE THEIR MEDICAL STUDIES AFTER 1ST OCTOBER 1892

For those who commenced Medical Studies before 1st October 1892, *see Regulations B, page* 645.

I. Four Degrees in Medicine and Surgery are conferred by the University of Edinburgh, viz., Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.). The Degree of Bachelor of Surgery is not conferred on any person who does not at the same time obtain the Degree of Bachelor of Medicine, and the Degree of Bachelor of Medicine is not conferred on any person who does not at the same time obtain the Degree of Bachelor of Surgery.

[These Degrees admit to the General Council of the University, and to the Medical Register. They qualify for Practice throughout Her Majesty's dominions, and for admission to the Military, Naval, and other Public Medical Services in the United Kingdom.]

II. Subject to Regulations to be made from time to time by the University Court, the University may also confer Diplomas in Special Branches of Medical and Surgical Practice on Graduates of the University in Medicine and Surgery.

PRELIMINARY EXAMINATION.[1]

III. Before commencing his medical studies, each student must pass a Preliminary Examination in (1) English, (2) Latin, (3) Elementary Mathematics, and (4) Greek or French or German: Provided always that, in the case of a candidate whose native language is not English, an examination in the native language of the candidate may be substituted for one in either French or German, and an examination in any other classical language for one in Latin or Greek.

IV. The extent and standard of the Preliminary Examination is determined by the Joint Board of Examiners constituted under Ordinance, General, No. 8 [Regulations as to Examinations], in accordance with the terms of that Ordinance.

[1] See also pages 626-630.

. V. The Preliminary Examination is conducted in accordance with the provisions of Ordinance, General, No. 8 [Regulations as to Examinations];—and, subject to the provisions of the immediately succeeding section hereof, the entire examination must be passed at one and the same time, except in the case of students who, prior to the date at which these Regulations came into operation, had passed a portion of the Preliminary Examination of the University, or of a Preliminary Examination recognised by the University.

VI. A Degree in Arts, or in Science (not being a Degree *honoris causa tantum*), in any of the Universities of the United Kingdom, or in any Colonial or Foreign University specially recognised for the purpose by the University Court, exempts from the Preliminary Examination; and the Joint Board of Examiners appointed under the provisions of Ordinance, General, No. 8 [Regulations as to Examinations], has power to determine what examinations, other than those for the degrees hereinbefore mentioned, shall be accepted either in whole or in part in place of the Preliminary Examination.

PROFESSIONAL EDUCATION.[1]

VII. Candidates are admitted to the Degree of Bachelor of Medicine and Bachelor of Surgery only after they have fulfilled the following conditions:—

1. The candidate must have been engaged in Medical study for at least five years.
2. In each of the first four years the candidate must have attended at least two courses of instruction, in one or more of the subjects of study specified in sub-section 4 hereof—each Course extending over a session of not less than five months, either continuous or divided into two terms; or, alternatively, one such Course, along with two Courses, each extending over a session of not less than two and a half months.
3. During the fifth or final year the candidate must be engaged in Clinical study for at least nine months at the Royal Infirmary, Edinburgh, or at one or more of such Public Hospitals or Dispensaries, British or Foreign, as may be recognised for the purpose by the University Court.
4. The Candidate must, during his Curriculum, have attended a Course or Courses of instruction in each of the following subjects of study, including such Examinations as may be prescribed in the various Classes, viz.:—

1. ANATOMY, ...	During a Course of not less than Five Months.

[1] No Course of Lectures will be allowed to qualify unless the Lecturer certifies that it has embraced at least 100 Lectures, or 50 Lectures, in conformity with the requirements of this section. Three Months Courses on Materia Medica, Pathology, and Midwifery do not qualify.

2. Practical Anatomy, ...	During two Courses of not less than Five Months each.[1]
3. Chemistry, ...	During Courses of not less than Five Months.
4. Materia Medica and Therapeutics, .	
5. Physiology or Institutes of Medicine,	
6. Practice of Medicine, ...	
7. Surgery, ...	
8. Midwifery, and the Diseases peculiar to Women and Infants. Two Courses of Midwifery, of Three Months each, provided different departments of Obstetric Medicine be taught in each of the Courses, are reckoned equivalent to a Course of not less than Five Months, ...	
9. Pathology, ...	
10. Practical Chemistry, ...	During Courses of not less than Two and a half Months.
11. Physics (including the Dynamics of Solids, Liquids, and Gases, and the Rudiments of Sound, Heat, Light, and Electricity), ...	
12. Elementary Botany, ...	
13. Elementary Zoology, ...	
14. Practical Physiology, ...	
15. Practical Pathology, ...	
16. Medical Jurisprudence and Public Health, ...	

Provided always in so far as regards the University of Edinburgh that—

(*a*) It is the duty of the Senatus to determine from time to time the number of meetings of which such Courses shall consist, and in what cases two half Courses shall be deemed equivalent to a full Course; and to report the determination to the University Court for its approval.

(*b*) It is the duty of the Professors and Lecturers to submit to the Senatus annually at the end of the Winter Session a scheme specifying what proportion of the Courses shall be devoted to Lectures, Practical Demonstrations, Examinations, and Tutorial Work respectively. The Senatus must transmit such scheme, with such observations as it may think fit to make thereon, to the University Court for its approval.

(*c*) The University Court will not grant or continue recog-

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[1] Certificates of attendance on Practical Anatomy must express not only the number of months engaged in dissection, but the names of the parts dissected, and the degree of care with which the dissections have been made. Students are recommended not to appear for Examination in Anatomy, with a view to a Degree, until they have dissected the human body at least once.

nition to any institutions or teachers unless it is satisfied that their Courses of Instruction are equivalent to the Courses sanctioned in the Universities of Scotland.

5. The Candidate must have attended for at least three years the Medical and Surgical Practice either of the Royal Infirmary, Edinburgh, or of a General Hospital elsewhere, which accommodates not fewer than eighty patients, and possesses a distinct staff of Physicians and Surgeons, and is recognised for the purpose by the University Court.[1]

6. The Candidate must have attended Clinical Surgery during a Course or Courses extending over not less than nine months. These Courses may be conducted by the Professor of Clinical Surgery, or by Professors or Lecturers appointed for the purpose by the University Court, or by the Ordinary Surgeons of the Royal Infirmary, Edinburgh, or of a General Hospital defined and recognised as hereinbefore provided, and must consist of regular instruction at the bedside, along with Clinical Lectures.

7. The Candidate must have attended Clinical Medicine during a Course or Courses extending over not less than nine months. These Courses may be conducted by Professors of the University, or by Lecturers appointed for the purpose by the University Court, or by the Ordinary Physicians of the Royal Infirmary, Edinburgh, or of a General Hospital defined and recognised as hereinbefore provided, and must consist of regular instruction at the bedside, along with Clinical Lectures.

8. The Candidate must have attended a course of instruction in Mental Diseases of such duration, and so apportioned between lectures, demonstrations, and clinical instruction, as the Senatus, with the approval of the University Court, may from time to time determine.

9. The Candidate must have attended a Course of twenty-five meetings on Practical Pharmacy in a University or recognised School of Medicine, or have dispensed drugs for a period of three months in an Hospital or Dispensary, or the establishment of any chemist and druggist or pharmaceutical chemist of Great Britain, or any pharmaceutical chemist of Ireland, who is registered in the Books of the Pharmaceutical Society of Great Britain or of the Pharmaceutical Society of Ireland respectively.

10. The Candidate must have attended, for at least six months, by apprenticeship or otherwise, the out-practice of an Hospital, or the practice of a Dispensary, or of a Physician or Surgeon, or of a Member of the London or Dublin Society of Apothecaries. He must have acted as Clerk in the Medical and Dresser in the Surgical Wards of a Public Hospital; and must also have availed

[1] The following hospital has been recognised under this section:—(1) North Staffordshire Infirmary and Eye Hospital, Hartshill, Stoke-upon-Trent, 1893. (2) The Dundee Royal Infirmary, 1895.

himself, to such an extent as may be required by the Senatus, with the approval of the University Court, of opportunities of studying, at an Hospital or Dispensary, *post-mortem* Examinations, Fevers, Diseases of Children, Ophthalmology, or such other special departments as may from time to time be determined.

11. The Candidate must have attended, under the superintendence of a registered Medical Practitioner, twelve cases of labour, or such additional number as the Senatus, with the sanction of the University Court, may from time to time determine; or have attended for three months the practice of a Lying-in Hospital, or of the Maternity Department of a General Hospital or other Public Charitable Institution, and have conducted personally six, or such an additional number of cases of labour as the Senatus, with the approval of the University Court, may from time to time determine.

12. The candidate must have been properly instructed in Vaccination at a Public Vaccination Station, by a Public Vaccinator, authorised by the proper Government Authority to grant Certificates of Proficiency in Vaccination.[1]

13. No candidate for a degree will be deemed to have attended a class as part of the Curriculum necessary for that degree who does not present a certificate bearing not only that he has given regular attendance, but also that he has duly performed the work of the class.

VIII. With respect to the Places and Institutions at which the studies of the candidate may be prosecuted, the following Regulations have effect:—

1. Two of the five years of medical study must be spent in the University of Edinburgh, each year of study including always the attendances specified in section VII., sub-section 2.

2. The remaining three years may be spent in any University of the United Kingdom, or in any Indian, Colonial, or Foreign University recognised for the purpose by the University Court, or in such Medical Schools or under such Teachers as may be recognised for the purpose by the University Court, each year of study during the first four years including always the attendances specified in section VII., sub-section 2.

3. Of the subjects of study specified in section VII., sub-section 4, not less than eight must be taken in the University of Edinburgh, or (subject always to the provisions as to attendance contained in the immediately preceding sub-sections) in some other University of the United Kingdom, or in some Foreign or Colonial University entitled to confer the Degree of Doctor of Medicine, recognised for the purpose by the University Court,

[1] Recognised Vaccine Departments in Edinburgh are—in the Royal Public Dispensary, 21 West Richmond Street — *Vaccinator*, Dr Husband; in the Western Dispensary, 90 Fountainbridge—*Vaccinator*, Dr J. B. Buist.

or in a College incorporated with, or affiliated to a University, entitled to confer the Degree of Doctor of Medicine, recognised for the purpose by the University Court: Provided always that where in any of said subjects of study two or more Courses are required, the taking of one of those Courses will constitute a taking of the subject for the purpose of this sub-section.

4. The remainder of such subjects of study may (subject always as aforesaid) be taken in such Medical Schools or under such Teachers as may be recognised for the purpose by the University Court.
5. All Candidates, not Matriculated Students of the University, availing themselves of the permission to attend the Lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names in a book to be kept in the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.
6. The Fee for attendance, for purposes of graduation, on the Courses of instruction of recognised Extra-Academical Teachers in Edinburgh, must be not less than the amount exigible for the corresponding Courses in the University.
   [*The fee must be paid at the commencement of the Course.*]
7. The University Court will not recognise as qualifying for examination in any of the subjects specified in section VII., sub-section 4, the class of any teacher who is at the time a teacher of more than one of the said subjects, except in those cases where Professors in the University are at liberty to teach the two subjects: Provided always that a Professor or other Teacher in any endowed public College or Institution, who, by the terms of his appointment, is required to teach more than one subject of Medical Study therein, may be recognised under sub-section 2 of this section as a Teacher of any one of the subjects which he teaches.
8. A Teacher, attendance on whose course of instruction, before the date of the approval of these Regulations by Her Majesty in Council, had been recognised for the purposes of graduation in the University, is not required to obtain a new recognition from the University Court; and attendance on the course of instruction of every such Teacher may continue to be recognised as heretofore.
9. It is in the power of the University Court, if it sees cause, at any time to withdraw or suspend any recognition which it may have granted.

IX. In the University of Edinburgh it is the duty of the Professors of the subjects specified in section VII., sub-section 4 hereof (except Practical Anatomy and such other subjects as the Senatus, with

the approval of the University Court, may from time to time determine), so to conduct the Courses that Students may receive instruction sufficient for graduation in any one of the said subjects by attendance on one Course of five or six months, or of two and a half or three months as the case may be.

X. If any Candidate, before presenting himself for his Preliminary Examination, has attended in any University of the United Kingdom, or in any University or Institution specially approved, or under any Teacher specially recognised for the purpose by the University Court, a Course or Courses of instruction in Physics, Chemistry, Botany, or Zoology, equivalent in the judgment of the Senatus to the qualifying Course in the same subject in the University of Edinburgh, such attendance will (notwithstanding anything hereinbefore stipulated) be held as entitling him to be examined in these subjects; and if the Candidate has attended such Course or Courses in each of the said subjects, he will be held to have completed his first year of Medical Study: Provided always that the evidence of such attendance at such equivalent Course or Courses must be presented to the Senatus at the time when the Candidate presents himself for his Preliminary Examination; and the Senatus will, if satisfied, grant a certificate to that effect.

By a Supplementary Ordinance of the Commissioners, the provisions of this section shall not have effect except where the University Court shall allow the application after a report by the Senatus Academicus, setting forth special grounds therefor in the case of any candidate named in the report.

PROFESSIONAL EXAMINATION FOR THE DEGREES OF BACHELOR OF MEDICINE AND BACHELOR OF SURGERY.

XI. Each candidate is examined, both in writing and orally, and also clinically where the nature of the subject admits, in the following divisions, viz.:—*First*, in Botany, Zoology, Physics, and Chemistry; *Second*, in Anatomy, Physiology, and Materia Medica and Therapeutics; *Third*, in Pathology, and Medical Jurisprudence and Public Health; *Fourth*, in Surgery and Clinical Surgery, Practice of Medicine and Clinical Medicine, and Midwifery.

In subjects which admit of practical instruction, the examination will be such as to test the practical acquirements of the candidate.

If a candidate for the Degrees of Bachelor of Medicine and Bachelor of Surgery have completed, in a University of the United Kingdom, a course of study and passed an examination in Botany, Zoology, Physics, or Chemistry qualifying for a Degree in Science or in Arts, he shall be held to have passed the examinations in such subject or subjects.

If a candidate have obtained a Degree in Science or in Arts in any University other than a University of the United Kingdom, granted in

either case after a course of study and an examination in Botany, Zoology, Physics, or Chemistry, it shall be in the power of the University Court to exempt such candidate from the examinations in such subject or subjects; provided that the course of study and the standard of examination in each case are satisfactory in the judgment of the Senatus Academicus.

XII. Candidates who profess themselves ready to submit to an examination in the subjects comprised in the first division, viz., Botany, Zoology, Physics, and Chemistry, may be admitted to examination in all or any two of these subjects at any examination held after they have attended a full Course in each of the subjects professed.

XIII. Candidates who have passed their examinations in the subjects comprised in the first division may be admitted to examination in the second division at the end of the third winter session.

Provided that candidates who so desire may postpone their examination in Materia Medica and Therapeutics until the close of the summer session following.

XIV. Candidates who have passed their examinations in the subjects comprised in the first and second divisions may be admitted to examination in the third division at the end of the fourth winter session.

Provided that candidates who so desire may postpone their examination in Medical Jurisprudence and Public Health until the close of the summer session following.

XV. Candidates who have passed their examinations in the subjects comprised in the first, second, and third divisions may be admitted to examination in the fourth or final division, when they have completed the fifth year of study.

XVI. If any candidate at these examinations be found unqualified in one or more subjects, he will not again be admitted to examination unless he has pursued his medical studies for such time, and subject to such conditions, as the Faculty of Medicine may prescribe.[1]

XVII. If any candidate at these examinations be found to have passed in one or more subjects with sufficient merit, he will not be liable to re-examination in such subject or subjects, although he may have been found unqualified in a subject or subjects comprised in the same division as hereinbefore specified.

XVIII. Every candidate must deliver,[2] on or before such day as the Senatus may from time to time determine, to the Dean of the Faculty of Medicine, a declaration, in his own handwriting, that he has completed his twenty-first year, or that he will have completed it on or before the day of graduation, and that he will not be, on the day of graduation, under articles of apprenticeship to any surgeon or other master.

XIX. After the candidate has satisfied the Examiners, the Dean of the Faculty of Medicine lays the proceedings before the Senatus,

[1] Satisfactory Certificates must be produced as evidence of study.

[2] On or before the date for lodging Certificates, &c., for the fourth division of the Examinations. See page 639.

by whose authority the candidate will be admitted, on such day as the Senatus may from time to time appoint, to the Degrees of Bachelor of Medicine and Bachelor of Surgery, on payment of the required fees.

XX. Candidates for graduation must produce evidence of their having conformed to the Regulations which were in force at the time they commenced their Medical Studies, except in so far as is provided in section XXIII. hereof.

PROFESSIONAL EXAMINATION FOR THE DEGREE OF DOCTOR OF MEDICINE.

XXI. 1. Subject to the conditions hereinafter specified, the Degree of Doctor of Medicine is conferred on any candidate who has obtained the Degrees of Bachelor of Medicine and Bachelor of Surgery of the University of Edinburgh, and is of the age of twenty-four years or upwards, and has produced a certificate of having been engaged, subsequently to having received the Degrees of Bachelor of Medicine and Bachelor of Surgery, for at least one year in attendance in the Medical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Military or Naval Medical Services, or for at least two years in Practice other than Practice restricted to Surgery.

2. Each candidate for the Degree of Doctor of Medicine is required to pass an examination in Clinical Medicine and in such of its special departments as the Senatus, with the approval of the University Court, by Regulations framed from time to time, may determine; and he may present himself for examination in Clinical Medicine at any period of examination subsequent to one year after he has received the Degrees of Bachelor of Medicine and Bachelor of Surgery.

3. Each candidate for the Degree of Doctor of Medicine must submit for the approval of the Faculty of Medicine a Thesis, on any branch of knowledge comprised in the second, third, or fourth examinations for the Degrees of Bachelor of Medicine and Bachelor of Surgery, which he may have made a subject of study after having received those Degrees, excepting subjects which are exclusively Surgical; and the Thesis, accompanied by a declaration signed by the candidate, that the work has been done and the Thesis composed by himself, must be lodged with the Dean of the Faculty of Medicine on or before a date to be fixed by the Senatus.[1]

[1] Candidates are required to write their Theses on faint lined paper, 11 in. by 8½ in. with margins 1½ in. at each side. The Thesis is to be written on one side of each leaf only, and it must be lodged on or before 30th April of the year in which the Candidate proposes to graduate.

4. A Bachelor of Medicine and Bachelor of Surgery, who produces to the Senatus satisfactory evidence of his intention of entering within twelve months after obtaining such degrees on the practice of his profession in a British Possession or Colony, or in a foreign Country, may, under Regulations to be framed by the Senatus, be admitted to the examination in Clinical Medicine at any period of examination after he has received such Degrees; but the Degree of Doctor of Medicine will not be conferred on him unless he produces a certificate that, subsequently to having received the Degrees of Bachelor of Medicine and Bachelor of Surgery, he has been engaged for at least one year in attendance in the Medical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Naval or Military Medical Services, or for at least two years in Practice which has not been exclusively surgical, and unless his Thesis, in the judgment of the Faculty of Medicine, is of exceptional merit. Bachelors of Medicine and Masters of Surgery of the University of Edinburgh, who have graduated under the regulations in force before 5th August 1892, may proceed to the Degree of Doctor of Medicine under the provisions of this section in the same manner as if they held the Degree of Bachelor of Surgery.

PROFESSIONAL EXAMINATION FOR DEGREE OF MASTER OF SURGERY.

XXII. 1. Subject to the conditions hereinafter specified the Degree of Master of Surgery will be conferred on any candidate who has obtained the Degrees of Bachelor of Medicine and Bachelor of Surgery of the University of Edinburgh, and is of the age of twenty-four years or upwards, and has produced a certificate of having been engaged, subsequently to his having received the Degrees of Bachelor of Medicine and Bachelor of Surgery, for at least one year in attendance in the Surgical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Military or Naval Medical Services, or for at least two years in practice other than practice restricted to Medicine.

2. Each candidate for the Degree of Master of Surgery is required to pass an examination in the following subjects:—Surgical Anatomy, Operations upon the dead body, and Clinical Surgery, and in such of the special departments of Clinical Surgery as the Senatus, with the approval of the University Court, by Regulations framed from time to time, may determine; and he may present himself for examination in these subjects at any period of examination subsequent to one year after he

has received the Degrees of Bachelor of Medicine and Bachelor of Surgery.

3. Each candidate for the Degree of Master of Surgery must submit, for the approval of the Faculty of Medicine, a Thesis on any branch of knowledge comprised in the second, third, or fourth Examinations for the Degrees of Bachelor of Medicine and Bachelor of Surgery, which he may have made a subject of study after having received those Degrees, excepting subjects that are exclusively medical; and the Thesis, accompanied by a declaration signed by the candidate that the work has been done and the Thesis composed by himself, must be lodged with the Dean of the Faculty of Medicine on or before a date to be fixed by the Senatus.[1]
4. A Bachelor of Medicine and Bachelor of Surgery who produces to the Senatus satisfactory evidence of his intention of entering within twelve months after obtaining such Degrees on the practice of his profession in a British Possession or Colony, or in a foreign Country, may, under Regulations to be framed by the Senatus, be admitted to examination in the subjects specified in sub-section 2 of this section at any period of examination after he has received such Degrees; but the Degree of Master of Surgery shall not be conferred on him unless he produces a certificate that, subsequently to having received the Degrees of Bachelor of Medicine and Bachelor of Surgery, he has been engaged for at least one year in attendance in the Surgical Wards of an Hospital, or in scientific work bearing directly on his profession, such as is conducted in the Research Laboratories of the University, or in the Naval or Military Medical Services, or for at least two years in Practice which has not been exclusively medical, and unless his Thesis in the judgment of the Faculty of Medicine is of exceptional merit.

DATE OF COMING INTO EFFECT.

XXIII. Every student who began his Medical Studies before 1st October 1892, when these Regulations came into operation, is entitled to graduate under the system in force before or after that date, according as he may comply with the Regulations in force in the University before or after that date.

Regulations of the University Court regarding Recognition of Schools in Edinburgh, &c., for the Medical Education of Women, 10th October 1894.

The University Court have recognised the Edinburgh School of Medicine for Women, Surgeon Square, Edinburgh, and the Medical

[1] See footnote, page 620.

College for Women, 30 Chambers' Street, Edinburgh, as Medical Schools whose courses of instruction qualify for graduation in Medicine, subject to the following conditions:—Provided 1. That every candidate for graduation shall produce evidence of having satisfied the conditions with respect to the Preliminary Examination and Registration as Medical Students, and shall be examined in all the subjects necessary for graduation by the Examiners of the University in which she takes her degree. 2. That the fees charged for classes or courses of instruction qualifying for graduation shall not be less than the fees for the corresponding courses of instruction within the University. 3. That the students attending either of these Schools shall be free to take a class or classes separately in either the one or the other of the Schools. 4. That all students not matriculated students of the University attending these Schools for purposes of graduation must, at the commencement of each year of such attendance, enter their names in a book to be kept in the University for that purpose, paying a fee of the same amount as the matriculation fee paid by students of the University, and having, in respect of such payment, a right to the use of the Library of the University. 5. That each of the aforesaid Schools make application annually to the University Court for a continuation of the recognition thus granted, and at the same time report to the Court on the administrative arrangements and discipline of the School. 6. That schedules of Class Returns, to be furnished by the Court, and giving the designation of the class or course, number of students, number of meetings, &c., be filled up by each of the teachers of the qualifying classes or courses of instruction in the aforesaid Schools, as in the case of the recognised Lecturers on Medicine, and forwarded to the Secretary of the Court not later than 1st July in each year. 7. That all advertisements referring to the recognition of the aforesaid Schools, or to the qualifying classes or courses of instruction to be given at any time in connection with these Schools, shall, before publication, be submitted to the Secretary of Senatus of the University, and receive his approval.

The Court have also recognised the University College, Dundee, under similar provisions.

ORDINANCES OF THE UNIVERSITIES' COMMISSIONERS, WHICH, IN ALL PROBABILITY, WILL COME INTO OPERATION BEFORE 1ST OCTOBER 1895.

I.—ORDINANCE No. 61, GENERAL No. 23—REGULATIONS FOR THE ENCOURAGEMENT OF SPECIAL STUDY AND RESEARCH, AND FOR THE APPOINTMENT OF RESEARCH FELLOWS.

I. It shall be in the power of the Senatus Academicus in each University, with the approval of the University Court, to make regulations under which Graduates of Scottish Universities or of other Universities recognised by the University Court for the purposes of this Ordinance, or other persons who have given satisfactory proof of

general education and of fitness to engage in some special study or research, may be admitted to prosecute such study or research in the University.

. . . . . .

III. Every applicant for admission must send in to the Senatus Academicus a written application stating any degree or other distinction which he has already obtained, the line of study or research which he wishes to prosecute and the probable period of its duration, together with evidence as to his character, capacity, and general qualifications.

IV. Any application for admission shall be in the first instance referred by the Senatus Academicus to the appropriate Faculty, or to a Committee appointed by the Senatus; one member of the Committee shall always be a Professor or Lecturer within whose department the proposed line of study or research falls. No applicant shall be recommended by the Faculty or the Committee who has not satisfied them by examination or otherwise that he is qualified to prosecute the proposed line of study or research, and further—

(*a*) That his proposed line of study or research is a fit and proper one;
(*b*) That he possesses a good general education;
(*c*) That he is of good character.
(*d*) That he proposes to prosecute his studies or research during a period to be approved by the Senatus Academicus.

The Faculty or the Committee shall make a report to the Senatus Academicus upon each application. It shall also be their duty, subject to the regulations of the Senatus Academicus, to provide for the supervision of the Research Student's work, and to report at least once a year to the Senatus as to his progress and conduct. The Senatus shall then determine whether he shall remain a Research Student.

V. Every Research Student shall be required to matriculate each year, paying the ordinary fee.

VI. Research Students shall have access to and the use of the University Laboratories and Museums, under such conditions as to payment and otherwise as the University Court, after consultation with the Senatus Academicus, may determine.

VII. The title of Research Fellow may be conferred by the Senatus Academicus, with the approval of the University Court, on Research Students who have shown special distinction. Such title shall not of itself confer any right to stipend, but it shall be in the power of the University Court to provide a stipend of such amount and for such period as it may think fit to any Research Fellow under the powers of Section XI., Sub-section 8, of Ordinances numbered 25 and 27, Section X., Sub-section 8, of Ordinance numbered 26, and Section IV., Sub-section 2, of Ordinance numbered 46.

VIII. (1) The Research Fellows shall be appointed as aforesaid after consideration of the report or reports submitted in terms of Section IV. hereof.

(2) The title of Research Fellow may be conferred either at the commencement of the Research Student's course of study or research, or at any time during its progress, as the Senatus Academicus may determine.

(3) Research Fellows shall retain their title and stipend, if any, for the period during which they are engaged in special study or research in the University, and no longer.

(4) Research Students who have been appointed Research Fellows shall continue to be subject to the conditions above prescribed as to the supervision of their work and the reports to be made thereon.

IX. Nothing herein contained shall prejudice the right of Research Students to such Fellowships, Scholarships, or Prizes as may be open to them by Ordinance or Deed of Foundation.

X. The University Court may, subject to the provisions of Section XI., Sub-section 8, of Ordinance No. 27, Edinburgh No. 6, provide such sums as it may think fit in aid of the expenses of Special Study or Research.

XI. This Ordinance shall come into force from and after the date of its approval by Her Majesty in Council.

II.—Ordinance No. 62, General No. 24—Regulations for Degree of D.Sc.[1]

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II. Research Students within the meaning of Ordinance No. 61 [General, No. 23—Regulations for the Encouragement of Special Study and Research and for the appointment of Research Fellows], may offer themselves for the degree of Doctor of Science of the University in which they have prosecuted some special study or research under that Ordinance, although they have not taken the degree of Bachelor of Science or the degree of Master of Arts with honours in that University; provided—

(1) That they hold the degree of Bachelor of Science or Bachelor of Medicine of a Scottish or any recognised University, or a degree of any such University, which the Senatus Academicus shall hold to be equivalent to the degree of Bachelor of Science or to the degree of Master of Arts with first or second class honours in Mathematics and Natural Philosophy; provided that candidates who hold any such

[1] See full Copy of Ordinance, page 135.

degree from a University outside the United Kingdom may be required, if the Senatus think fit, before beginning their course as Research Students with a view to the degree of Doctor of Science, to pass an examination equivalent to an Honours or to a Final Science examination in a group of subjects cognate to their line of work as Research Students.

(2) That they have spent not less than two winter sessions or an equivalent period as Research Students in the University granting the degree, and that they produce evidence of satisfactory progress in the special study or research undertaken by them during that period.

(3) That a period of not less than five years shall have elapsed from the date of the graduation required in sub-section (1) of this section.

III. All candidates for the degree of Doctor of Science shall present a thesis or a published memoir or work, to be approved by the Senatus on the recommendation of the Faculty of Science; provided that, if required by the Senatus, the candidate shall also be bound to pass such an examination conducted orally or practically, or by written papers, or by all of these methods, on the subjects of his special study or of his thesis, as may from time to time be determined. The thesis shall be a record of original research undertaken by the candidate, and shall be accompanied by a declaration signed by him that the work has been done and the thesis composed by himself.

. . . . . .

XIII. The degree of Doctor of Science shall in no case be conferred on persons who have not satisfied the conditions hereinbefore set forth, and shall not be conferred *honoris causa tantum*.

PRELIMINARY EXAMINATION.

In Addition to the Regulations for the Preliminary Examination for Degrees in Medicine and Surgery, Sections III.-VI. inclusively, pages 612 and 613, the Joint-Board have directed as follows:—

For the Medical Preliminary Examination, the papers set in Latin, Greek, and Mathematics, shall be the same as those set on the Lower Standard in these subjects in the Arts and Science Preliminary Examination.[1]

The papers set in English (i) In April and October 1895, and in April and October 1896, shall be of a Lower Standard than the papers set in this subject in the Arts and Science Preliminary Examination.[1]

(ii) In and after April 1897 the papers set in English shall no longer be of the same character as the paper on English in the Arts and Science

[1] See page 140.

Examination; no set books shall be prescribed, nor shall a general knowledge of the life and works of the greater authors be expected of candidates, but one or two questions may be set, giving an opportunity to candidates to show a knowledge of famous literary works. The historical questions shall not be confined to any one period, but shall cover the whole of British History, and shall be set in such a way as to give an opportunity to candidates who have confined their studies to a single period to show their knowledge. A single three hours' paper shall be set, containing an Essay, a Paraphrase, two questions on History, two on Geography, four on Grammar (including Correction of Sentences, Parsing, Analysis of Sentences, and Derivations), two of a literary and general kind. Eight answers shall be required. The Essay, the Paraphrase, one answer on History, and one on Geography shall be compulsory.

N.B.—In October 1895, and in April and October 1896, alternative papers will be set in English, one on the lines laid down in paragraph (i), and the other on the lines laid down in paragraph (ii), and candidates may select whichever they prefer.

The papers set in French and German shall be of a Lower Standard than those set in these subjects in the Arts and Science Preliminary Examinations.[1]

It shall be in the option of any candidate for the Medical Preliminary to take the papers set on the Higher Standard for the Arts Preliminary in any of the subjects.

Excellence in one or more subjects will be permitted to compensate in some measure for deficiency in any of the other subjects. Such excellence may be shown either by attaining a high percentage of marks on the Lower Standard, or by passing on the Higher Standard.

Candidates who, having taken English, Latin, Greek, Mathematics, or a Modern Language, on the Higher Standard, as prescribed by the Regulations for the Arts and Science Preliminary, have obtained a satisfactory percentage of marks, shall be held to have passed the Medical Preliminary in these subjects, provided that all the subjects required by the Regulations of the General Medical Council are taken at the same time.

For subjects of Examination, see Regulations for Latin, (Lower Standard), Greek (Lower Standard), Mathematics (Lower Standard),[1] French and German, under Arts and Science Preliminary Examination.

Examinations Accepted as Exempting from the Preliminary Examination in Medicine: Provided always that the Regulations of the General Medical Council regarding the Registration of Students of Medicine be complied with.

1. In terms of the Regulations for Degrees in Medicine and Surgery, "a Degree in Arts or in Science (not being a Degree *honoris causâ*

[1] See page 141.

tantum) in any of the Universities of the United Kingdom, or in any Colonial or Foreign University, specially recognised for the purpose by the University Court, shall exempt from the Preliminary Examination."

In virtue of the powers conferred on them by the Medical Regulations, Section VI., page 613, the Joint-Board have resolved as follows :—

2. Any Candidate who produces a Certificate of having passed the Preliminary Examination in Arts or Science in any Scottish University, either at the University Examination or through the Leaving Certificates of the Scotch Education Department, or partly at the University Examination, and partly through the Leaving Certificates, shall be held to have passed the Preliminary Examination for Medicine, provided that the Examination has included the specified subjects of General Education as required under the Regulations of the General Medical Council, and by the Regulations for Graduation in Medicine and Surgery (Sections III.-VI. inclusive, pages 612 and 613).

3. A Candidate who has obtained the Leaving Certificate (Honours or Higher Grade) of the Scotch Education Department in any subject recognised for the Medical Preliminary Examination, shall be exempted from further examination in that subject in the aforesaid Preliminary Examination.

The Regulation that all the subjects of the Examination shall be passed at one and the same time shall not be held to apply to either of the above cases, 2 and 3. But Candidates complying with these Rules (2 and 3) must obtain a University Certificate specifying the Examinations passed by them which have been accepted as equivalents to the Preliminary, and must present said Certificate to the Medical Registrar in order to registration.

Further, each such Candidate when applying for said Certificate must, if he has not entered for any part of the Preliminary, produce a Matriculation Card from some one of the Scottish Universities.

4. Lower Grade Leaving Certificates of the Scotch Education Department will only be accepted as exempting from the Medical Preliminary Examination, provided examinations in all the requisite subjects have been taken and passed at one and the same time.

No Examinations conducted in Scotland, other than those of the Scotch Education Department, will be accepted as equivalent to the Preliminary Examinations in Medicine.

5. The following English and Irish University Examinations will be accepted (provided they include all the subjects required under the Regulations of the General Medical Council, and prescribed by the Medical Ordinances of the Scottish University Commissioners, see Sections III.-VI. inclusive of Regulations for Graduation in Medicine and Surgery, pages 612 and 613), viz. :—

Oxford.—Responsions ; Moderations.

Cambridge.— Previous Examination.

Oxford and Cambridge Schools Examinations.

London.—Matriculation Examination of the University of London.

Dublin, Trinity College.—Public Entrance Examination.

Royal University of Ireland.—Matriculation Examination.

Victoria University.—The Preliminary Examination; the Entrance Examination in Arts.

6. The Examinations of the following Indian, Colonial, and Foreign Universities and Colleges, which are accepted by the General Medical Council, will also be accepted (provided the Examinations include all the subjects required by the General Medical Council, and prescribed by the Medical Ordinances of the Scottish University Commissioners—see Sections III.-VI. inclusive of Regulations for Graduation in Medicine and Surgery, pages 612 and 613), viz. :—

University of (1) *Calcutta*, (2) *Madras*, and (3) *Bombay.*—Entrance Examination.

Universities of (1) *M'Gill College, Montreal;* (2) *Bishop's College, Montreal;* (3) *Toronto;* (4) *Trinity College, Toronto;* (5) *Queen's College, Kingston;* (6) *Victoria College, Upper Canada;* (7) *Halifax, Nova Scotia;* and (8) *Fredericton, New Brunswick*—Matriculation Examination.

University of Mount Allison College, New Brunswick.—Examination for a Degree in Arts.

University of King's College, Nova Scotia. — Matriculation Examination; Responsions.

Dalhousie College and University, Halifax.—Matriculation and Sessional Examinations.

Western University of Ontario.—Entrance Examination in Medicine.

University of Manitoba.—Previous Examination.

College of Physicians and Surgeons of Ontario.—Preliminary Examinations.

Provincial Medical Board of Nova Scotia. — Matriculation Examination.

University of Melbourne.—Matriculation Examination.

University of Sydney.—Matriculation Examination.

University of the Cape of Good Hope.—Matriculation Examination; Examination for a Degree in Arts.

University of Adelaide.—Matriculation Examination; or its substitute, the Senior or Junior Public Examination.

Codrington College (*Barbados*).—English Certificate for Students of two years' standing, and Latin Certificate, or "Testamur."

Tasmanian Council of Education.—Examination for the Degree of Associate of Arts.

University of New Zealand.—Entrance Examination.

University of Otago.—Preliminary Examination.

Christ's College, Canterbury, New Zealand.—Voluntary Examinations.

Ceylon Medical College.—Preliminary Examination (Primary Class).

Germany and other Continental Countries.—Gymnasial Abiturienten-Examen, and corresponding Entrance Examinations to the Universities.

7. In the case of Candidates for the Medical Preliminary Examination, who hold qualifications from Foreign or Colonial Bodies, other than Universities, whose certificates are not included in the list of Equivalent Examinations issued by the Joint Board, a Committee in each University, consisting of the Deans of the Faculties of Arts, Science, and Medicine, are empowered to accept such certificates, if they deem them sufficient, provided that all such cases are reported to the Joint Board at their meeting next following.

Revised 31*st January* 1895.

DATES OF ENTERING FOR PRELIMINARY EXAMINATION AND OF PAYMENT OF FEES.

Each Candidate is required to pay a fee of 10s. 6d. for each appearance at the Preliminary Examination.

Candidates who intend to present themselves for Examination may obtain Schedules at the Office of the Faculty of Medicine, University New Buildings. The Schedules must be completed and lodged and the fees paid at the Matriculation Office, University (Old) Buildings, not later than 20th September 1895 and 18th March 1896 for the autumn and spring Examinations respectively.

Candidates who cannot attend personally to pay the fees should transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts* crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh, and not by cheques on private accounts. When names are not entered nor Fees paid on or before the stated dates, an addi-

tional or late entry fee of 10s. must be paid before the Candidate can be admitted to Examination. A Candidate is not held to have entered for the Examination until his Schedule is lodged, the Fee paid, and a Pass to the Examination obtained.

TIME-TABLE FOR PRELIMINARY EXAMINATIONS FOR 1895-96.

		Medical Preliminary Examinations.	Arts and Science Preliminary Examinations.
1895.			
Sept. 28	Sat.	English, 9-11, 12-2 Greek, 3-6 Do., 3-5[1]	English, 9-11, 12-2 Lower Greek, 3-6
,, 30	Mon.	Latin, 9-12 Mathematics, 2-5	Lower Latin, 9-12 Lower Mathematics, 2-5
Oct. 1	Tu.	French, 3-6 Do., 3-5[1]	Higher Latin, 9-11, 12-2 French, 1st paper, 3-4.30
,, 2	Wed.	German, 3-6 Do., 3-5[1]	Higher Greek, 9-11, 12-2 German, 1st paper, 3-4.30
,, 3	Th.	Higher Mathematics, 9-11, 12-1.30[1]	Intermediate and Higher Mathematics, 9-11, 12-1.30 French, 2nd paper, 3-5
,, 4	Fri.	Moral Philosophy, 9-11[1] Mechanics, 1-4[1]	German, 2nd paper, 9-11 Dynamics, 1-4
,, 5	Sat.	Natural Philosophy, 9-11[1] Logic, 2-4[1]	
1896.			
Mar. 28	Sat.	English, 9-11, 12-2 Greek, 3-6 Do., 3-5[1]	English, 9-11, 12-2 Lower Greek, 3-6
,, 30	Mon.	Latin, 9-12 Mathematics, 2-5	Lower Latin, 9-12 Lower Mathematics, 2-5
,, 31	Tu.	French, 3-6 Do., 3-5[1]	Higher Latin, 9-11, 12-2 French, 1st paper, 3-4.30
Apr. 1	Wed.	German, 3-6 Do., 3-5[1]	Higher Greek, 9-11, 12-2 German, 1st paper, 3-4.30
,, 2	Th.	Higher Mathematics, 9-11, 12-1.30[1]	Intermediate and Higher Mathematics, 9-11, 12-1.30 French, 2nd paper, 3-5
,, 3	Fri.	Moral Philosophy, 9-11[1] Mechanics, 1-4[1]	German, 2nd paper, 9-11 Dynamics, 1-4
,, 4	Sat.	Natural Philosophy, 9-11[1] Logic, 2-4[1]	

[1] For Students completing the Examination under the Old Regulations.

REGULATIONS AS TO CLASS EXAMINATIONS.

With a view to promote the Educational interests of the students during the time they are occupied with the respective subjects in the Classes, the Senatus recommend :—

1. That there should be at least two Special Class-Examinations in the Classes in the Faculty of Medicine during each Session, conducted by means of questions and written answers, without aid from books or notes.

2. That in the event of a student gaining 75 per cent. or more of the available marks in any department, he shall obtain a Certificate in the First Class of Honours.

3. That in the event of a student gaining 50 per cent. or more, but less than 75 per cent., of the available marks in any department, he shall receive a Certificate in the Second Class of Honours.

University Bronze Medals are also given for Competitive Class Examinations.

CERTIFICATES OF ATTENDANCE ON CLASSES IN THE FACULTY OF MEDICINE.

The Senatus Academicus have resolved that the Certificates of Attendance to be granted to students in the Faculty of Medicine shall be regulated in the following manner :—

Each Professor shall ascertain the presence of his pupils at least twenty-six times in a Course of six months' duration, and thirteen times in a Course of three months' duration.

Those who have been absent twelve or more times in a six months' Course, or six or more times in a three months' Course, or have not duly performed the work of the Class, including any Examinations that may be held, shall not be entitled to any Certificate.

The following is the form of Certificate which must be adopted in all cases :—

"I certify that Mr attended my Course of Instruction on during the Session ; that he was present on of the occasions on which attendance was ascertained ; and that he duly performed the work of the class."

Exceptions will be admitted in the case of those who may be absent from sickness or other unavoidable causes, the particulars of which must be stated to the Professor in writing, accompanied with certificates. All excuses for non-attendance must be given in immediately upon the student returning to his class. But if any student shall have been absent for six weeks or upwards, in a Course of six months, or for three weeks

in a Course of three months (whatever the cause of absence may be), his case must be transmitted to the Dean of the Faculty for the decision of the Faculty.

Whenever the student's cause for absence shall be admitted by the Professor or by the Faculty, the Certificate shall bear that he "attended," and shall state the amount of the irregularity and the nature of the excuse.

FIRST PROFESSIONAL EXAMINATION.

The Faculty of Medicine have resolved that the written and oral examinations on Chemistry, Elementary Botany, Elementary Zoology, and Physics shall be restricted in the following manner :—

1. *Chemistry.*—Chemical changes as distinguished from physical changes. Elements; compounds; mixtures. Laws of chemical combination by weight and by volume. The atomic theory. Atoms; molecules. Law of Avogadro. Molecular weights of gaseous and volatile substances. Atomic weights. Law of Dulong and Petit. Chemical Notation—Symbols; formulæ; equations. Simple chemical calculations.

The non-metallic elements and their chief compounds; especially the compounds of oxygen, of hydrogen, and of chlorine with the other non-metals. The more important inorganic acids. The atmosphere. Combustion. Oxidation and reduction.

The following metallic elements and their chief compounds; especially those with oxygen, with chlorine, and with sulphur: Gold, platinum, silver, mercury, lead, antimony, tin, copper, bismuth, zinc, iron, aluminium, chromium, manganese, barium, strontium, calcium, magnesium, potassium, sodium.

The following salts: the ammonium salts; the more important sulphates, sulphites, thiosulphates, nitrates, nitrites, carbonates, bromides, iodides, iodates, phosphates, borates, silicates.

The relations of bases, acids, and salts. Electrolysis. Quantivalence. The periodic law.

The metallurgy of silver, mercury, copper, lead, tin, zinc, iron. Alloys, such as brass, bronze, solder, type-metal. Amalgams.

The manufacture of aluminium, magnesium, potassium, sodium, glass, porcelain, mortar, gunpowder, sulphuric acid, sodium carbonate and bicarbonate, caustic soda, bleaching powder and chlorates, wrought-iron, steel, white lead.

Classification of Carbon Compounds. Marsh Gas and its Homologues. Chloroform. Methylic and Ethylic Alcohols and Ethers. Substituted ammonias and ammonium salts. Formic and Acetic

Acids, Aldehyde, Acetone, Chloral, Olefiant Gas, Oxalic Acid, Lactic Acids. Tartaric Acid, Citric Acid. Fats and Oils, Saponification, Glycerine. Cellulose, Sugars, Starch. Distillation of Wood and of Coal. Benzene, Benzoic Acid, Phenol, Salicylic Acid, Oil of Bitter Almonds. Hydrocyanic Acid, Cyanides, Cyanates, Thiocyanates, Urea, Uric Acid.

Simple Qualitative Analysis. The examination in this is conducted practically. Candidates are required to examine unknown *single salts* for both metallic and salt radicals, as contained in the following lists :—

Silver, Mercurous, Mercuric, Cupric, Lead, Stannous, Stannic, Bismuth, Antimony (*Tartar Emetic* may be given), Arsenious, Zinc, Manganous, Ferrous, Ferric, Chromic, Aluminium, Calcium, Barium, Strontium, Magnesium, Ammonium, Sodium, Potassium.

Carbonate, Sulphite, Thiosulphate, Sulphide, Hypochlorite (Bleaching solution), Nitrite, Chloride, Bromide, Iodide, Cyanide, Sulphate, Chromate, Orthophosphate, Arseniate, Arsenite, Borate, Oxalate Nitrate, Chlorate, Acetate.

At the examination, Candidates are supplied with the following reagents, &c. :—Acetic Acid, dilute Hydrochloric Acid, dilute Nitric Acid, Sulphuric Acid, dilute Sulphuric Acid, Alcohol, Iodine, Ammonia, Ammonium Carbonate, Ammonium Chloride, Ammonium Oxalate, Ammonium Sulphide, Barium Nitrate, Bleaching Powder, Calcium Chloride, Calcium Hydrate, Calcium Sulphate, Cobaltous Nitrate, Cupric Sulphate, Ferric Chloride, Ferrous Sulphate, Lead Acetate, Magnesium Sulphate, Mercuric Chloride, Potassium Carbonate, Potassium Chromate, Potassium Ferricyanide, Potassium Ferrocyanide, Potassium Hydrate, Potassium Iodide, Silver Nitrate, Sodium Bitartrate, Sodium Phosphate, Sodium Sulphite, Stannous Chloride, Sulphuretted Hydrogen. *Solids*—Manganese Dioxide, Sodium Carbonate, Borax, Sulphur, Zinc, Copper.

Test papers :—Blue Litmus, Red Litmus, Plain, Starch, Turmeric.

Bunsen Burner, Test Tubes.

2. *Elementary Botany.*—The characteristic features of the following groups and classes of the vegetable kingdom :—

Thallophyta [Schizophyta, Algæ, Fungi]; Muscineæ [Hepaticæ, Musci]; Pteridophyta [Filicineæ, Equisetineæ, Lycopodineæ]; Phanerogamæ [Gymnospermæ, Angiospermæ (Monocotyledones, Dicotyledones)].

The fundamental facts and principles of Morphology (including Anatomy, Histology, and Development) and Physiology. The life-history of the following plants :—Bacterium, Saccharomyces, Mucor, Vaucheria, Eurotium, Funaria, Aspidium, Pinus, Scilla, Helianthus, Ulmus ; and the characters of plants belonging to the following natural orders of Phanerogamæ :—Coniferæ, Gramineæ, Orchideæ, Liliaceæ, Urticaceæ, Labiatæ, Compositæ, Umbelliferæ, Rosaceæ, Leguminosæ, Cruciferæ, Ranunculaceæ.

3. *Elementary Zoology.*—(*a*) The General Principles of Biology.

(*b*) The distinctive characters of the Invertebrate groups, and the structure, habits, &c., of Amœba, Paramœcium, Hydra, Arenicola, Hirudo, Anodon, Helix, Nephrops, and Periplaneta.

(*c*) The distinctive characters of the Chordata groups, and the structure, habits, &c., of Myxine, Raia, Rana, Columba, Ornithorhynchus, Macropus, Lepus, Ovis, and Canis.

(*d*) The skeletons of Crocodilus, Equus, Felis (skull only), Balæna, Vespertilio, and Troglodytes.

(*e*) A general knowledge of the orders of Mammalia.

(*f*) The life-histories of Gregarina, Distoma, Tænia, Ascaris, Trichina, and Filaria.

(*g*) The outlines of the development of Amphioxus, Scyllium, and Rana, and of the fœtal appendages of Gallus and Lepus.

(*h*) The principles of the Geographical Distribution of Animals, and the Distribution of the Mammalia.

4. *Physics.*—(*a*) Properties of Matter—including Inertia, Gravitation, Molecular Forces, &c.

(*b*) Abstract Dynamics—including Kinematics and Newton's Laws of Motion, with their consequences as regards Statics and Kinetics of Solid, Liquid, and Gaseous Bodies, with the Physical Measurement of Time.

(*c*) Sound and Wave-propagation in general, Intensity, Pitch and Quality of Musical Sounds, Harmonics, Concords, &c.

(*d*) Heat, its Nature, Effects, Measurement, Transference and Transformations—Measurement of Temperature and of absolute Temperature, Thermodynamics.

(*e*) Light (1), Geometrical Optics, Speed of Light, Laws of Reflection and Refraction, Construction and Effects of Mirrors, Prisms, Lenses, and Microscopes, Images, Conditions of Distinct Vision. (2) Physical Optics—Interference, Dispersion, Diffraction, Double Refraction, Polarisation, Spectrum Analysis.

(*f*) Electricity, including Frictional and Voltaic Electricity, Thermo- and Magneto-Electricity, Electro-Dynamics and Magnetism, with their practical applications. Measurements of Potential, Electromotive Force, Current, &c., Batteries, Dynamos, Electrometers, Galvanometers, Voltameters, &c.

HONOURS AT PROFESSIONAL EXAMINATIONS.

Candidates who have displayed special merit at any of the Professional Examinations will be announced as having passed that Examination "with distinction."

Candidates who have displayed special merit at each of the Professional Examinations will be announced, at the time of the Graduation,

as having obtained First or Second Class Honours, according to the merit that has been displayed.

SPONSIO ACADEMICA TO BE SIGNED BY GRADUATES IN MEDICINE.

Ego Doctoratus in Arte Medica titulo jam donandus, sancte coram Deo cordium scrutatore, spondeo, me in omni grati animi officio erga Universitatem Academicam Edinburgensem ad extremum vitæ halitum perseveraturum.

Tum porro Artem Medicam caute, caste, probeque exercitaturum, et quoad potero, omnia ad ægrotorum corporum salutem conducentia cum fide procuraturum. Quæ, denique, inter medendum visa vel audita sileri conveniat, non sine gravi causa vulgaturum.

Ita præsens spondenti adsit Numen.

FEES FOR DEGREES IN MEDICINE AND SURGERY UNDER THE NEW REGULATIONS.

FEES FOR M.B. AND CH.B.

Fee for the First Division of the Examination, viz., Botany, Zoology, Physics, and Chemistry . .		£6 6 0
or		
For any two of the subjects . .	£3 3 0	
For the other two subjects . .	3 3 0	
For the Second Division, viz., Anatomy, Physiology, and Materia Medica and Therapeutics . . .		6 6 0
or		
For Anatomy and Physiology . .	£4 4 0	
For Materia Medica and Therapeutics	2 2 0	
For the Third Division, viz., Pathology, and Medical Jurisprudence and Public Health		4 4 0
For the Final Division, viz., Surgery and Clinical Surgery, Medicine and Clinical Medicine, and Midwifery		6 6 0
		£23 2 0

Candidates who fail to pass either in the whole or in one or more of the subjects in any of the divisions of the Examination, pay £1, 1s. for each subject in which they have failed before they can be re-admitted to Examination in that subject.

Candidates who, under the proviso in Section XI. of the Regulations, are exempted from the first division of the Examination, are required,

after passing the final division of the Examination, to pay a fee of £6s, 6s. before they can be admitted to the Degrees of Bachelor of Medicine and Bachelor of Surgery.

Fee for M.D.	£10 10 0
Government Stamp-Duty (for M.D. only), . .	10 0 0
Total for M.D.	£20 10 0
Fee for Ch.M.	£10 10 0

Every Candidate for Examination or for Graduation is required to be a Matriculated Student of the year in which he appears for Examination or Graduation.

Every Candidate for Graduation is also required to pay the fee of £1 for Registration as a Member of the General Council, if not already a Member.

N.B.—The above Fees include all charges for the Diplomas, and Graduates are requested to apply personally for their Diplomas at the Matriculation Office between 12 and 4 on the day of graduation. Any Graduate who cannot appear personally is required to give written authority to some person to receive and give a receipt for his Diploma.

DATES OF EXAMINATIONS, AND FOR PRESENTING CERTIFICATES, AND PAYING FEES FOR DEGREES, &c., UNDER NEW REGULATIONS.

The dates of the Examinations for 1895-96 have been fixed as follows, and Candidates are required to assemble in the Examination Hall at the University a quarter of an hour before the time fixed for examination.

Preliminary Examination.[1]

See Time-Table and Dates of Entering, &c., pages 630 and 631.

PROFESSIONAL EXAMINATIONS UNDER THE NEW REGULATIONS.

Candidates are required to present their Certificates for the Examinations at the Office of the Faculty of Medicine, University New Buildings, and to pay the fees at the Matriculation Office, University (Old) Buildings.

Candidates, in lodging statements of their Courses of Study with the

[1] If names are not entered nor fees paid on or before the stated dates, a late entry fee of ten shillings must be paid before the Candidate can be admitted to Examination. A Candidate is not held to have entered for the Examination until his Name is entered, all the necessary Certificates, &c., lodged, and the Fee paid.

Dean of the Faculty, will observe that for all Courses and Subjects of Study the Faculty will receive Certificates only as evidence of attendance.

First Professional Examination.[1]

This Examination takes place in March and July. Candidates may be admitted to Examination in all or in any two subjects, after they have attended a full course in each of the subjects professed.

1896.

Mar.	16.	Mon.	Names to be given in, Certificates shown, and Fees paid for the Examination in March, *on or before* this date.
,,	21.	Sat.	Practical Chemistry Examination begins at hours to be announced.

Written Examinations.

,,	23.	Mon.	Chemistry at 10 o'clock; Botany at 1 o'clock.
,,	24.	Tu.	Natural History at 10 o'clock; Physics at 1 o'clock.
,,	25.	Wed.	Oral Examinations begin.

July Examinations.

1896.

July	10.	Fri.	Names to be given in, Certificates shown, and Fees paid *on or before* this date.
,,	18.	Sat.	Practical Chemistry Examination begins at hours to be announced.
,,	20.	Mon.	Chemistry at 10 o'clock; Botany at 1 o'clock.
,,	21.	Tu.	Zoology at 10 o'clock; Physics at 1 o'clock.
,,	22.	Wed.	Oral Examinations begin.

Second Professional Examination.[1]

This Examination takes place in March and July. Candidates who have passed the First Examination may be admitted to this Examination at the end of their Third Winter Session.

March Examinations.

Mar.	20.	Fri.	Names to be given in, Certificates shown, and Fees paid *on or before* this date.

Written Examinations.

,,	26.	Thur.	Anatomy at 10 o'clock; Physiology at 1 o'clock.
,,	27.	Fri.	Materia Medica and Therapeutics at 10 o'clock. Oral Examinations begin.

Candidates may postpone their Examination in Materia Medica and Therapeutics until the close of the Summer Session following.

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[1] See footnote, page 637.

1896. *July Examinations.*

July 6. Mon. Names to be given in, Certificates shown, and Fees paid *on or before* this date.

Written Examination.

,, 15. Wed. Anatomy at 10 o'clock; Physiology at 1 o'clock.
,, 16. Thur. Materia Medica and Therapeutics at 10 o'clock. Oral Examinations begin.

THIRD PROFESSIONAL EXAMINATION.[1]

This Examination takes place in March and July, and Candidates who have passed the Second Examination may be admitted to this Examination at the end of their Fourth Winter Session.

Mar. 20. Fri. Names to be given in, Certificates shown, and Fees paid *on or before* this date.

Written Examinations.

,, 27. Fri. Pathology at 1 o'clock.
,, 28. Sat. Medical Jurisprudence and Public Health at 10 o'clock.
,, 30. Mon. Oral Examinations begin.

Candidates may postpone their Examination in Medical Jurisprudence and Public Health until the close of the Summer Session following.

1896. *Written Examination.*

July 6. Fri. Names to be given in, Certificates shown, and Fees paid *on or before* this date.
,, 16. Thur. Pathology at 1 o'clock.
,, 17. Fri. Medical Jurisprudence and Public Health at 10 o'clock.
,, 18. Sat. Oral Examinations begin.

FOURTH OR FINAL PROFESSIONAL EXAMINATION.[1]

This Examination takes place in May and June, and may be taken when the Candidate has passed the Third Examination, and has completed his Fifth year of Medical Study.

April 22. Wed. Names to be given in, Certificates shown, and Fees paid *on or before* this date.

Written Examinations.

May 4. Mon. Clinical Surgery Examinations begin.
,, 5. Tu. Clinical Medicine Examinations begin.
June 15. Mon. Medicine at 10 o'clock.
,, 16. Tu. Surgery at 10 o'clock; Midwifery at 1 o'clock; Prescriptions at 3.30 o'clock.
,, 17. Wed. Oral Examinations begin.

[1] See footnote, page 637.

1896. DEGREE OF DOCTOR OF MEDICINE.[1]

April 30. Thur. Theses to be lodged, Certificates shown, and Fees paid *on or before* this date.

Written Examination.

Clinical Medicine. Date to be afterwards announced.

July 15. Wed. Stamp Duty to be paid *on or before* this date.

DEGREE OF MASTER OF SURGERY.[1]

April 30. Thur. Theses to be lodged, Certificates shown, and Fees paid *on or before* this date.

Written Examinations.

Surgical Anatomy.
Operations on the dead body.
Clinical Surgery.
} Dates to be afterwards announced.

July 20. Mon. Names to be given in for Graduation, and the Registration Fee (if not previously registered) paid *on or before* this date.

Aug. 1. Sat. GRADUATION CEREMONIAL at 10 A.M. Graduands to assemble at 9 A.M.

Information relative to Matriculation and the Curriculum of Study, and the Subjects of Examinations for Degrees in Medicine and Surgery, and for Fellowships, Scholarships, Bursaries, Prizes, &c., &c., may be obtained on application to the Dean of the Faculty of Medicine, University New Buildings.

The fees for Matriculation, for Examinations for Degrees, and for Registration as Member of the General Council of the University, are payable at the *Matriculation Office*, *University* (*Old*) *Buildings*. When Candidates cannot attend personally to pay the fees, they should transmit them to T. GILBERT, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed "*Union Bank of Scotland* (*Hunter Square Branch*), *Edinburgh*," and not by cheques on private accounts. When a fee is paid by a cheque on a Bank, an additional sixpence is required to be added to meet Bank exchange, unless the cheque be payable in Edinburgh or London.

EXTRA-ACADEMICAL TEACHERS.

REGULATIONS OF THE UNIVERSITY COURT RELATIVE TO CERTIFICATES OF ATTENDANCE GRANTED BY EXTRA-ACADEMICAL TEACHERS.

The Certificate of Attendance granted to Students by recognised Extra-Academical Teachers, should, in all cases, state the number of

[1] See footnote, page 637.

Lectures, or of Meetings for Practical Instruction, in the Course; the number of occasions on which attendance was ascertained; and the number of those occasions on which the Student was present, and in what further respects he duly performed the work of the class. The Certificate should also state the general scope of the Course; and, in particular, in the case of *Chemistry*, that the Course included Organic as well as Inorganic Chemistry; in the case of *Midwifery*, that it included the Diseases of Women and Children; and, in the case of *Practical Materia Medica*, that it included Pharmacognosy, Pharmacy, Dispensing, and the writing of Prescriptions.

LIST OF EXTRA-ACADEMICAL TEACHERS, WHOSE LECTURES QUALIFY FOR GRADUATION IN THIS UNIVERSITY.

ABERYSTWYTH.

		Date of Recognition.
J. Ainsworth Davis, M.A.	Natural History,	28 July 1886.
D. Morgan Lewis	Physics,	16 July 1894.
J. H. Salter, B.Sc.	Botany,	30 Oct. 1893.
H. Lloyd Snape, D.Sc.	Chemistry & Practical Chemistry,	19 March 1888.

BANGOR.

James J. Dobbie, D.Sc.,	Chemistry & Practical Chemistry,	30 May 1885.
Andrew Gray,	Physics,	2 Oct. 1892.
Reginald W. Phillips, M.A.,	Botany,	30 May 1885.
Philip J. White, M.B.,	Natural History,	9 Dec. 1889.

BELFAST.

R. O. Cunningham, M.D.,	Zoology,	18 Feb. 1895.

BIRMINGHAM.

F. J. Allen, M.A.,	Physiology & Practical Physiology,	12 Dec. 1887.
T. W. Bridge, M.A.,	Zoology,	9 July 1883.
Percy F. Frankland,	Chemistry & Practical Chemistry,	16 July 1894.
W. Hillhouse, M.A.,	Botany,	26 Nov. 1883.
J. H. Poynting, D.Sc.,	Physics,	12 June 1893.
Wm. A. Tilden, D.Sc.,	Chemistry & Practical Chemistry,	9 July 1883.
Bertram C. A. Windle, M.D.,	Anatomy,	17 Nov. 1884. 29 Oct. 1888.

Bristol.

		Date of Recognition.
G. Munro Smith, L.R.C.P., M.R.C.S.	Physiology & Practical Physiology,	29 Oct. 1888.

(*Certificates for two consecutive Lecture Courses required.*)

Cardiff.

John Berry Haycraft, M.D.,	Physiology,	16 July 1894.
A. W. Hughes, M.B.,	Anatomy,	16 July 1894.
J. V. Jones, M.A., B.Sc.,	Physics,	16 July 1894.
W. N. Parker, Ph.D.,	Natural History,	28 July 1886.
Claud M. Thompson, M.A., D.Sc.,	Chemistry & Practical Chemistry,	28 July 1886.

(*Lecture Course may be divided between two consecutive Sessions.*)

A. H. Trow, B.Sc.,	Botany,	16 July 1894.

Cork.

J. J. Charles, M.D., D.Sc.,	Physiology,	18 Feb. 1895.

(*Qualifying Course to embrace "Ordinary Course" and Course for Senior Students.*)

Marcus Hartog, M.D., D.Sc.,	Zoology,	18 Mar. 1895.

Dublin.

A. C. Haddon, M.A.,	Natural History,	23 Jan. 1888.
Chs. R. C. Tichborne, Ph.D.,	Practical Chemistry,	28 Feb. 1881.

Edinburgh.

A. P. Aitken, D.Sc.,	Chemistry & Practical Chemistry,	29 Oct. 1888.
J. O. Affleck, M.D.,	Practice of Physic,	8 Dec. 1879.
Byrom Bramwell, M.D.,	Practice of Physic,	18 Oct. 1880.
J. Macdonald Brown, M.B.,	Anatomy & Practical Anatomy,	18 July 1884.
Alexander Bruce, M.D.,	Pathology & Practical Pathology,	24 January 1887.
A. G. Bruce,	Practical Materia Medica,	18 June 1894.
Francis M. Caird, M.B., C.M.,	Surgery,	13 August 1886.
Wm. Craig, M.D.,	Materia Medica & Prac. Materia Med.	14 July 1879.

EDINBURGH—*continued.*		*Date of Recognition.*
T. W. Drinkwater, Ph.D.	Chemistry, and Practical Chemistry,	8 March 1880. 14 July 1879.
John Duncan, M.D.,	Clinical Surgery,	28 July 1886.
William Duncan,	Prac. Materia Med.,	12 April 1886.
George A. Gibson, M.D.,	Practice of Physic,	9 Dec. 1889.
David Berry Hart, M.D.,	Midwifery,	22 Oct. 1894.
F. W. N. Haultain, M.D., F.R.C.P.E.,	Midwifery,	15 June 1891.
J. W. B. Hodsdon, M.D.,	Surgery,	3 August 1888.
John Hunter, F.I.C., &c.,	Chemistry & Practical Chemistry,	22 Oct. 1894.
Alex. James, M.D.,	Practice of Physic,	3 August 1888.
Alexander Johnstone,	Botany,	26 Oct. 1892.
J. Falconer King, F.C.S.,	Chemistry & Practical Chemistry,	12 Nov. 1894.
R. F. C. Leith, M.B., B.Sc.,	Pathology, Prac. Pathology,	26 Oct. 1892. 13 June 1892.
H. D. Littlejohn, M.D.,	Med. Jurisprudence,	before 1861.
Stevenson Macadam, Ph.D.,	Chemistry & Practical Chemistry,	before 1861.
W. Ivison Macadam, F.R.S.E.	Chemistry & Practical Chemistry,	23 July 1888.
A. N. M'Alpine, B.Sc.,	Botany,	8 March 1880.
Chas. W. MacGillivray, M.D., and P. H. M'Laren, M.D.,	Clinical Surgery,	14 Nov. 1892.
J. S. M'Laren, M.B.,	Surgery,	26 Oct. 1892.
Augustus A. Matheson, M.D.,	Midwifery,	15 May 1889.
Alexander Miles, M.D.,	Anatomy and Practical Anatomy,	12 Feb. 1894.
Alexander G. Miller, M.D.,	Clinical Surgery,	3 August 1888.
R. Milne Murray, M.B.,	Midwifery,	13 August 1886.
James Musgrove, M.D.,	Anatomy,	16 July 1894.
D. Nöel Paton, M.D.,	Physiology and Prac. Physiology,	24 Oct. 1887. 19 March 1888.
R. W. Philip, M.D.,	Medicine,	16 July 1894.
J. B. Readman, D.Sc.,	Practical Chemistry,	17 Dec. 1888.
William Russell, M.D.,	Pathology & Practical Pathology,	6 August 1887.
Ralph Stockman, M.D.,	Materia Medica & Prac. Materia Med.,	9 Dec. 1889.
Alexis Thomson, M.D.,	Surgery,	30 Oct. 1893.
J. Arthur Thomson, M.A.,	Natural History,	28 July 1886.
R. Turnbull, B.Sc.,	Botany,	18 Feb. 1895.
Dawson F. D. Turner, M.D.,	Physics,	20 March 1893.
J. R. Whitaker, M.B.,	Anatomy,	16 July 1894.
William Wood, M.B.,	Prac. Materia Med.,	15 June 1893.
John Wyllie, M.D.,	Practice of Physic,	20 Dec. 1878.

GLASGOW.

		Date of Recognition.
John Barlow, M.D.,	Physiology,	26 Nov. 1883.
	Prac. Physiology,	8 January 1890.
A. M. Buchanan, M.D.,	Anatomy and Practical Anatomy,	12 Oct. 1874.
H. E. Clark, M.D.,	Surgery,	12 Feb. 1894.
James Dunlop, M.D.,	Surgery,	12 Oct. 1874.
Samson Gemmell, M.D.,	Practice of Physic,	18 July 1881.
R. T. Kent, F.R.C.S.,	Practical Anatomy,	18 Dec. 1893.
E. E. Prince, B.A., F.L.S.,	Zoology,	15 June 1891.
Alex. Robertson, M.D.,	Practice of Physic,	15 June 1891.
John Lindsay Steven, M.D.,	Pathology & Practical Pathology,	10 April 1893.

LONDON.

G. B. Howes,	Natural History,	18 July 1887.
T. E. Thorpe, Ph.D., F.R.S.,	Chemistry & Practical Chemistry,	9 Dec. 1889.

NOTTINGHAM.

J. W. Carr, M.A.,	Botany,	16 Jan. 1893.
Frank Clowes, D.Sc.,	Chemistry & Practical Chemistry,	9 Dec. 1889.

SHEFFIELD.

W. Carlton Williams, B.Sc.,	Chemistry & Practical Chemistry,	26 Nov. 1883.

RIGHTS OF THE GRADUATES IN MEDICINE AND SURGERY OF SCOTLAND ACCORDING TO THE MEDICAL ACT.

Before the passing of the Medical Act of 1858, the Degree of Doctor of Medicine granted by the Universities of Scotland (as the possessor underwent a complete education and examination in all departments of Medicine, Surgery, and Midwifery), qualified the Graduate to practise every branch of the Medical profession throughout Scotland. One principal purpose of the Medical Act was to extend local rights of practice over the whole of Her Majesty's dominions. But according to the hitherto accepted reading of a dubious clause in the Act, no one can practise both Medicine and Surgery without possessing two distinct Diplomas—one for Medicine and another for Surgery. The Universities were

thus compelled, in justice to their Graduates, to give them the additional title of Master in Surgery, not as implying any additional study or examination, but as declaring more distinctly their qualifications, and to permit Registration as regularly qualified practitioners in the whole field of their professional education.

The Secretary for War some time ago issued an Order that candidates for admission into the Medical service of the Army should obtain their qualifications in Physic and Surgery from two different sources; the effect of which would have been to prevent any one University from qualifying for this purpose. The Scottish Universities' Commissioners, recognising the serious evils of such a system, followed up a remonstrance which had been offered on the part of the University of Edinburgh, and obtained the rescinding of all restrictions in the source of qualification. Consequently, any single University in Scotland can now qualify candidates for the Military and Naval Services as well as for any other public Medical service in the country.

The Commissioners under Universities (Scotland) Act of 1889 passed an Ordinance which came into force on 1st October 1892 authorising the University to confer Four Degrees in Medicine and Surgery, viz.: Bachelor of Medicine (M.B.), Bachelor of Surgery (Ch.B.), Doctor of Medicine (M.D.), and Master of Surgery (Ch.M.).

B.—REGULATIONS FOR GRADUATION IN MEDICINE AND SURGERY, APPLICABLE TO ALL WHO COMMENCED THEIR MEDICAL STUDIES BEFORE 1ST OCTOBER 1892.

Three Degrees in Medicine and Surgery are conferred by the University of Edinburgh—viz., Bachelor of Medicine (M.B.), Master in Surgery (C.M.), and Doctor of Medicine (M.D.). The Degree of Master in Surgery is not conferred on any person who does not at the same time obtain the Degree of Bachelor of Medicine.

These Degrees admit to the General Council of the University, and to the Medical Register. They qualify for Practice throughout Her Majesty's dominions, and for admission to the Military, Naval, and other Public Medical Services in the United Kingdom.

All Candidates must give evidence of having obtained a satisfactory General Education.

PRELIMINARY EXAMINATION.[1]

See Time-Table of Examinations, Dates for Entering and Payment of Fees, &c., pp. 630 *and* 631.

I. The preliminary branches of extra-professional education are English, Latin, Arithmetic, the Elements of Mathematics, and the Elements of Mechanics; and the proficiency of Students in these branches is ascertained by examination, prior to the commencement of their medical study.

II. No candidate is admitted to a professional examination who has not passed a satisfactory examination on at least two of the following subjects (in addition to the subjects mentioned above):—Greek, French, German, Higher Mathematics, Natural Philosophy, Logic, Moral Philosophy; and the examination on these latter subjects also takes place before the candidate has entered on his Medical Curriculum.

III. A Degree in Arts (not being an Honorary Degree) in any one of the Universities of England, Scotland, or Ireland, or in any Colonial or Foreign University, specially recognised for this purpose by the University Court, exempts from all preliminary examination; and an Examination in Arts by any corporate body, whose examination has been recognised as qualifying for entrance on medical study by resolution of the General Medical Council of the United Kingdom, provided the said examination by the said corporate body shall be also approved by the University Court, shall exempt, *pro tanto*, from preliminary examination in Arts, on the subjects comprised in the said examination of the said corporate body.[1]

Optional Preliminary Subjects of Examination under the Old Regulations for Bachelors of Medicine who intend to proceed to the Degree of Doctor of Medicine, and for those who commenced the Study of Medicine by attendance on Medical Classes before 1*st October* 1892, *from Autumn* 1895 *to Spring* 1897 *inclusively.*

Each candidate is required to pay a fee of 10s. 6d. for each appearance at the Preliminary Examination.

1. GREEK.—Xenophon, *Cyropaedia*, Book VII. Some easy sentences of English will be set to be translated into Greek.

[1] The Dean of the Faculty will give information regarding examinations which exempt from the Preliminary Examination; and see CALENDAR for 1892-93, and previous Calendars, for examinations which exempt.

2. FRENCH.—Alphonse Daudet's *Le petit Chose, première partie* (Hachette & Co.). An easy passage in English will be given for translation into French.

3. GERMAN.—Homann, *Deutsche Märchen*, Nos. 8-14. An easy passage in English will be given for translation into German.

4. HIGHER MATHEMATICS.—Same as Higher Mathematics for the Preliminary Examination for the Degree in Arts. See pages 125 and 141.

5. NATURAL PHILOSOPHY.—(1.) Properties of matter—Elasticity, Density, Porosity, Capillarity, &c. (2.) Elementary phenomena of Sound, Light, Heat, Electricity, and Magnetism. Text-Books recommended—Balfour Stewart's *Elementary Physics*, and Tait's *Properties of Matter*.

6. LOGIC.—*Either* (*a*) The Elements of Deductive and Inductive Logic, as in Fowler or Jevons; *or* (*b*) Professor Campbell Fraser's *Selections from Berkeley*, Editor's "Historical Introduction," Author's *Principles of Human Knowledge*, and *Divine Visual Language: A Dialogue*.

7. MORAL PHILOSOPHY.—Professor Calderwood's *Handbook of Moral Philosophy*.

PROFESSIONAL EDUCATION.

IV. No one is admitted to the DEGREES of BACHELOR of MEDICINE and MASTER in SURGERY who has not been engaged in Medical and Surgical study for four years—the Medical Session of each year, or *Annus Medicus*, being constituted by at least two Courses of not less than one hundred lectures each, or by one such Course, and two Courses of not less than fifty lectures each; with the exception of the Clinical Courses, in which lectures are to be given at least twice a week during the prescribed periods.

V. Every candidate for the Degrees of M.B. and C.M. must give sufficient evidence by certificates—[1]

1. That he has studied each of the following departments of Medical Science, viz.,

ANATOMY, ...	During Courses including not less than One Hundred Lectures.
CHEMISTRY, ...	
MATERIA MEDICA, ...	
INSTITUTES OF MEDICINE OR PHYSIOLOGY,	
PRACTICE OF MEDICINE, . . .	

[1] No Course of Lectures will be allowed to qualify unless the Lecturer certifies that it has embraced at least 100 lectures or 50 lectures, in conformity with the requirements of this section. Three Months' courses on Materia Medica, Pathology, and Midwifery do not qualify.

SURGERY, ...	During Courses including not less than One Hundred Lectures.
MIDWIFERY, and the DISEASES peculiar to WOMEN and CHILDREN; two Courses of Midwifery, of Three Months each, being reckoned equivalent to a Six Months' Course, provided different departments of Obstetric Medicine be taught in each of the Courses, . .	
GENERAL PATHOLOGY, or in Schools where there is no such Course, a Three Months' Course of Lectures on Morbid Anatomy, together with a Supplemental Course of Practice of Medicine or Clinical Medicine,	
PRACTICAL ANATOMY, .	A Course of the same duration as those of not less than One Hundred Lectures above prescribed.[1]
PRACTICAL CHEMISTRY, .	Three Months.
CLINICAL MEDICINE, .	Courses of the same duration, as those of not less than One Hundred Lectures above prescribed, or Two Courses of Three Months, Lectures being given at least twice a week.
CLINICAL SURGERY, .	
MEDICAL JURISPRUDENCE, . .	During Courses including not less than Fifty Lectures.
BOTANY, ...	
NATURAL HISTORY, including ZOOLOGY,	

2. That he has attended for at least two years the Medical and Surgical Practice of a General Hospital which accommodates not fewer than eighty patients, and possesses a distinct staff of Physicians and Surgeons.

3. That he has attended during a Course of not less than fifty hours' instruction the Class of Practical Materia Medica and Pharmacy in the University of Edinburgh, or a similar class conducted in a University or recognised School of Medicine, or a similar Class conducted at the Laboratory of an Hospital or Dispensary, or elsewhere, by a Teacher recognised by the University Court under Section VI. Sub-section 4; or, that he has been engaged by apprenticeship,[2] for not less than two years, with a Registered Medical Practitioner, or a Member of the Pharmaceutical Society of Great Britain, or a Member of the Phar-

[1] Certificates of attendance on Practical Anatomy must express not only the number of months engaged in dissection, but the names of the parts dissected, and the degree of care with which the dissections have been made. Students are recommended not to appear for examination in Anatomy, with a view to a Degree, until they have dissected the human body at least once.

[2] Apprenticeship, Dispensary or Hospital Practice, Practical Midwifery, and Vaccination, &c., are not reckoned as *Classes* in making up an *Annus Medicus*.

maceutical Society of Ireland, or a Pharmaceutical Chemist, or Chemist and Druggist, registered under the provisions of the "Act for regulating the qualifications of Pharmaceutical Chemists, 1852," "The Pharmacy Act, 1868," or "The Pharmacy Act (Ireland), 1875," in the *bona fide* compounding and dispensing of Drugs, and the preparation of their officinal and other Preparations under his superintendence.

4. That he has attended, for at least six months, by apprenticeship or otherwise, the *out-practice* of an Hospital, or the practice of a Dispensary, Physician, Surgeon, or Member of the London or Dublin Society of Apothecaries.

5. That he has attended at least twelve cases of labour under the superintendence of a registered Medical Practitioner; or that he has attended six such cases, and also has attended for at least three months the practice of a Midwifery Hospital in which practical instruction is regularly given.

6. That he has attended, during courses of not less than fifty hours' instruction, Classes of Practical Physiology and Practical Pathology in the University of Edinburgh, or in a University or School of Medicine recognised by Sub-sections 2 and 4 of Section VI. of Ordinance No. 8, Edinburgh No. 3, or upon Classes thereof, conducted by a Teacher recognised by the University Court under the said Sub-section 4.

VI. The studies of candidates for the Degrees of Bachelor of Medicine and Master in Surgery are subject to the following Regulations :—

1. One of the four years of Medical and Surgical study, required by Section IV., must be in the University of Edinburgh.

2. Another of such four years of Medical and Surgical study must be either in the University of Edinburgh, or in some other University entitled to give the Degree of Doctor of Medicine.

3. Attendance during at least six winter months on the Medical or Surgical Practice of a General Hospital, which accommodates at least eighty patients, and, during the same period, on a course of Practical Anatomy, may be reckoned as one of such four years, and to that extent shall be held equivalent to one year's attendance on Courses of Lectures as above prescribed.

4. One year's attendance on the Lectures of Teachers of Medicine in the Hospital Schools of London (including the Professors in the Faculty of Science, in subjects required for graduation, in King's College and University College, London), or in the School of the College of Surgeons in Dublin, or of such Teachers of Medicine in Edinburgh, or elsewhere, as may from time to time be recognised by the University Court, may be reckoned as one of such four years, and to that extent shall be held as attendance on Courses of Lectures as above prescribed.

5. Candidates may, to the extent of Four of the Departments of Medical Study required by Section V., Sub-section 1, attend in such year or years of their Medical and Surgical studies, as may be most convenient to them, the Lectures of the Teachers of Medicine specified in the foregoing Sub-section 4.

[Thus, Students of Medicine in the London Schools and in the School of the College of Surgeons in Dublin can obtain there two *Anni Medici* out of the four required for the Edinburgh Degrees in Medicine. Courses of Lectures in these Schools, and the Courses of the Medical Teachers and of the Science Teachers in King's College and in University College, London, in the Subjects of Graduation, are regarded as equivalent to Lectures on the corresponding subjects in this University, except Materia Medica and Midwifery, which, when only three months' Courses, are not received as equivalent. One *Annus Medicus* may be constituted by attendance on Practical Anatomy and Hospital Practice during the Winter Session. Another *Annus Medicus* by attending either, (*a*), full Winter Courses on any two of the following subjects: Anatomy, Physiology, Chemistry, Pathology, Surgery, Medicine, Clinical Surgery, Clinical Medicine; or (*b*), on one such Course and two three months' Courses on any of the following subjects: Botany, Practical Chemistry, Natural History, Medical Jurisprudence. If the Student selects the arrangement prescribed in (*a*), attendance on a third Course, although unnecessary to constitute an *Annus*, will also be accepted. The other subjects, and the additional Courses, not given in London or Dublin, necessary for the degrees of the University, require to be attended at this University.

In Provincial Schools, where there are no Lecturers recognised by the University Court, a Candidate can have only One *Annus Medicus*, and this is constituted by attendance on a Qualified Hospital along with a course of Practical Anatomy, but in a Provincial School where there are two or more Lecturers recognised by this University, a Second *Annus Medicus* may be made by attendance on at least two six months', or one six months' and two three months', recognised Courses.

6. All candidates not Students of the University, availing themselves of the permission to attend the Lectures of Extra-Academical Teachers in Edinburgh, must, at the commencement of each year of such attendance, enrol their names in a book to be kept by the University for that purpose, paying a Fee of the same amount as the Matriculation Fee paid by Students of the University, and having, in respect of such payment, a right to the use of the Library of the University.

7. The Fee for attendance on the Lectures of an Extra-Academical

Teacher in Edinburgh, with a view to Graduation, must be of the same amount as that exigible by Medical Professors in the University.

[*The Fee must be paid at the commencement of the Course.*]

8. No Teacher is recognised who is at the same time a Teacher of more than one of the prescribed branches of study, except in those cases where Professors in the University are at liberty to teach two branches.

9. It is not necessary for any Teacher, attendance on whose Lectures was recognised before 1861 for the purposes of Graduation in the University, to obtain a new recognition from the University Court; and attendance on the Lectures of every such Teacher will continue to be recognised as heretofore.

10. It is in the power of the University Court, if they shall see cause, at any time to withdraw or suspend the recognition of any Teacher or Teachers.

VII. Every Candidate must deliver, before the 31st day of March of the year in which he proposes to Graduate, to the Dean of the Faculty of Medicine—

1. A declaration, in his own handwriting, that he has completed his twenty-first year, [or that he will have completed it on or before the day of Graduation,] and that he will not be, on the day of Graduation, under articles of apprenticeship to any Surgeon or other master. (This declaration, along with a statement of studies, is appended to the Schedule for the Final Examination, and must be signed before the Schedule is given in.)

2. A statement of his studies, as well in Literature and Philosophy as in Medicine, accompanied with proper certificates.

PROFESSIONAL EXAMINATIONS.

VIII. Each candidate is examined, both in writing and *viva voce*—*Firstly*, on Chemistry, Botany, and Natural History; *Secondly*, on Anatomy, Institutes of Medicine, Materia Medica [including Practical Pharmacy and Prescribing], and Pathology; *Thirdly*, on Surgery, Practice of Medicine, Midwifery, and Medical Jurisprudence; *Fourthly*, Clinically on Medicine and on Surgery in an Hospital. The examinations on Anatomy, Chemistry, Institutes of Medicine, Botany, Natural History, Materia Medica and Pathology are conducted, as far as possible, by demonstrations of objects placed before the candidates.

IX. Students who profess themselves ready to submit to an examination in the first division of these subjects may be admitted to examination therein at the first period of examination after they have completed their attendance on the necessary classes: provided always that it shall be lawful for students to proceed to examination in the said subjects under one or more of the following sub-divisions, namely—(*a*) Botany and Natural History, (*b*) Chemistry (including Practical Chemistry), (*c*) Botany and Chemistry (including Practical Chemistry), or (*d*) Natural History and Chemistry (including Practical Chemistry), at the first period of examination after they have completed attendance on the relative classes; and to proceed to examination in the remaining subject or subjects at a subsequent period of examination.

X. Students who have passed their examination on the first division of these subjects, may be admitted to examination on the second division at the end of their third year.

XI. The examination on the third and fourth divisions cannot take place until the candidate has completed his fourth *Annus Medicus*.

XII. Candidates may, if they choose, be admitted to examination on the first two of these divisions at the end of their third year, or to the four examinations at the end of their fourth year.

[Thus, Candidates for the First Professional Examination, after they have completed attendance on the necessary Classes, may appear for Examination in all the subjects, or they may appear for Examination in one or more of the separate sub-divisions mentioned in Section IX.; for the Second Professional Examination attendance for three complete *Anni Medici* is required; and for the Final Professional Examination, four complete *Anni Medici* are required. Qualifying courses must have been attended on all the subjects of each division or sub-division of Examination previously to the Candidate being admitted to examination in that division.]

XIII. If any candidate at these examinations be found unqualified, he cannot be again admitted to examination unless he

has studied, during another year, two of the prescribed subjects,[1] either in the University, or in some other School of Medicine.

XIV. After the candidate has satisfied the Medical Examiners, the Dean will lay the proceedings before the Senatus Academicus, by whose authority the candidate will be admitted on the first day of August, or, if that day be Sunday, then on the following day, to the Degrees of Bachelor of Medicine and of Master in Surgery.

XV. The Senatus Academicus, on the day here appointed will assemble at ten o'clock A.M., for the purpose of conferring Degrees ; and no candidate, unless a sufficient reason be assigned, shall absent himself, on pain of being refused his Degree for that year.

XVI. Candidates for Graduation are required to produce evidence of their having conformed to the Regulations which were in force at the time they commenced their Medical Studies.

DEGREE OF DOCTOR OF MEDICINE.

XVII. The Degree of DOCTOR OF MEDICINE may be conferred on any candidate who has obtained the Degrees of Bachelor of Medicine and Master in Surgery, and is of the age of twenty-four years, and produced a certificate of having been engaged subsequently to his having received the Degrees of Bachelor of Medicine and Master in Surgery, for at least two years in attendance on an Hospital, or in the Military or Naval Medical Services, or in Medical and Surgical Practice:

Provided always that the Degree of Doctor of Medicine shall not be conferred on any person, unless he be a Graduate in Arts of one of the Universities of England, Scotland, or Ireland, or of such other Universities as are above specified [Section III.], or unless he shall, before or at the time of his obtaining the Degrees of Bachelor of Medicine and Master in Surgery, or thereafter, have passed a satisfactory examination on *three* of the subjects mentioned in Section II. of the Statutes relative to Pre-

[1] Satisfactory Certificates must be produced as evidence of such study.

liminary Examination. Two of these must be Greek, and either Logic or Moral Philosophy, and the third must be one of the following subjects at the option of the Candidate—namely, French, German, Higher Mathematics, and Natural Philosophy.

And provided also that the candidate for the Degree of Doctor of Medicine shall submit to the Faculty of Medicine a Thesis, certified by him to have been composed by himself, and which shall be approved by the Faculty, on any branch of knowledge comprised in the professional examinations for the Degrees of Bachelor of Medicine and Master in Surgery, which he may have made a subject of study after having received those Degrees. The Candidate must lodge his Thesis with the Dean on or before 30th April of the year in which he proposes to graduate. No Thesis will be approved by the Medical Faculty which does not contain either the results of original observations in practical Medicine, Surgery, Midwifery, or in some of the sciences embraced in the curriculum for the Bachelor's and Master's Degrees; or else a full digest and critical exposition of the opinions and researches of others on the subject selected by the Candidate, accompanied by precise references to the publications quoted, so that due verification may be facilitated.[1]

Candidates, settled for a period of years in foreign parts, who have complied with all the regulations for the Degree of M.D. (under the new Statutes), but who cannot appear personally to receive the Degree, may, on satisfying the Senatus to that effect, by production of sufficient official testimonials, have the Degree conferred on them in absence.

EXAMINERS.

XVIII. The Medical Examiners for all candidates for Graduation in Medicine are the Professors in the Faculty of Medicine, along with thirteen non-professorial Examiners appointed annually by the University Court.

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[1] Candidates are required to write their Theses on faint lined paper, 11 in. by 8½ in. with margins 1½ in. at each side. The Thesis is to be written on one side of each leaf only.

XIX. The provisions of these Statutes came into operation on the 4th of February 1861.

XX. Persons who began their medical studies before the 4th of February 1861, are entitled to graduate under the system in force before or after that date, according as they may comply with the regulations in force in the University before or after that date.

The Regulations regarding Matriculation, Attendance on the necessary Classes, Class Examinations, Vaccination, &c., are the same as under the New Regulations.

FEES FOR DEGREES, &c. (OLD REGULATIONS).

Examination in Botany, Chemistry, Chemical Testing, Natural History,	£5	5	0
Examination in Anatomy, Institutes of Medicine, Materia Medica, Prescriptions, Pathology,	5	5	0
Final Examination in Surgery, Midwifery, Practice of Physic, Medical Jurisprudence, Clinical Medicine (with Prescriptions), Clinical Surgery, during last Summer Session,	10	10	0
Total Fees for M.B. and C.M. Diplomas,	£21	0	0
Additional Fee for M.D. Diploma,	£5	5	0
Government Stamp-Duty (for M.D. only),	10	0	0
Total Fees for M.D. Diploma,	£15	5	0
Matriculation Fee,	£1	1	0
Fee for Registration as a Member of the University General Council, if not already a Member,	1	0	0

In the event of the Candidate failing to pass any one of the Professional Examinations, the Fee is not returned ; but he may appear at one subsequent examination without paying an extra Fee, and at any future examination on paying a Fee of £2, 12s. 6d.

DATES OF EXAMINATIONS, AND FOR PRESENTING CERTIFICATES, AND PAYING FEES FOR DEGREES UNDER OLD REGULATIONS,[1] &c.

Preliminary Examination.

See Time-Table of Examinations, Dates of Entering, &c., pages 630 *and* 631.

The dates of the Examinations for 1895-96 have been fixed as follows, and Candidates are required to assemble in the Examination

[1] See footnote, page 637

Hall at the University a quarter of an hour before the time fixed for examination.

PROFESSIONAL EXAMINATIONS UNDER OLD REGULATIONS.

Candidates are required to present their Certificates for Examinations at the Office of the Faculty of Medicine, University New Buildings, and to pay the fees at the Matriculation Office.

Candidates lodging statements of their Courses of Study with the Dean of the Faculty, will observe that for all Courses and Subjects of Study the Faculty will receive Certificates only as evidence of attendance.

First Professional Examination.[1]

1896.

Mar.	16.	Mon.	Names to be given in, Certificates shown, and Fees paid for the Examination in March *on or before* this date.[1]
,,	21.	Sat.	Practical Chemistry begins at hours to be announced.
			Written Examination.
,,	23.	Mon.	Chemistry, 10; Botany, 1.
,,	24.	Tues.	Zoology, 10.
,,	25.	Wed.	Oral Examinations begin.
July	10.	Fri.	Names to be given in, Certificates shown, and Fees paid for the Examination in July *on or before* this date.
,,	18.	Sat.	Practical Chemistry begins at hours to be announced.
			Written Examination.
,,	20.	Mon.	Chemistry, 10; Botany, 1.
,,	21.	Tues.	Zoology, 10.
,,	22.	Wed.	Oral Examinations begin.

Second Professional Examination.[1]

Mar.	20.	Fri.	Names to be given in, Certificates shown, and Fees paid for the Examination in March *on or before* this date.
,,	26.	Thur.	Anatomy, 10; Physiology, 1.
,,	27.	Fri.	Materia Medica, 10; Pathology, 1. Oral Examinations begin.
July	6.	Mon.	Names to be given in, Certificates shown, and Fees paid for the Examination in July *on or before* this date.

[1] See footnote, page 637.

1896.

July	15.	Wed.	Anatomy, 10; Physiology, 1.
,,	16.	Thur.	Materia Medica, 10; Pathology, 1. Oral Examinations begin.

FINAL PROFESSIONAL EXAMINATION.[1]

April	22.	Wed.	Names to be given in, Certificates shown, and Fees paid *on or before* this date.
May	4.	Mon.	Clinical Surgery Examinations begin.
,,	5.	Tu.	Clinical Medicine Examinations begin.
June	15.	Mon.	Practice of Physic, 10; Medical Jurisprudence, 1.
,,	16.	Tues.	Surgery, 10; Midwifery, 1; Prescriptions, 3.30.
,,	17.	Wed.	Oral Examinations begin.

DEGREE OF M.D.[1]

April	30.	Thur.	Theses to be given in, Certificates shown, and Fees paid *on or before* this date.
July	15.	Wed.	Stamp Duty to be paid *on or before* this date.
,,	20.	Mon.	Names to be given in for Graduation and Registration Fee (if not previously registered) paid *on or before* this date.
Aug.	1.	Sat.	GRADUATION CEREMONIAL at 10 A.M. Graduands are required to assemble at 9 A.M.

DOCTORS OF MEDICINE

WHO HAVE BEEN AWARDED GOLD MEDALS FOR THEIR THESES FROM 1889 TO 1894, BOTH YEARS INCLUDED.[2]

1889.

Herbert H. Ashdown, England
John W. Ballantyne, Scotland
Arthur J. M'D. Bentley, England
Kenneth M. Douglas, Scotland
Thomas A. Helme, England
Henry Alexis Thomson, Scotland
Joseph Tillie, Scotland
Herbert F. Waterhouse, England

1890.

Joseph Griffiths, Wales
Robert Muir, Scotland
George Edmund Pierez, Ceylon
W. G. A. Robertson, Scotland
Arthur Robinson, England
John David Williams, Wales

1891.

Edmund W. W. Carlier, England
Vaughan Berkeley Harley, England
David Hepburn, Scotland
Alexander Miles, Scotland
James Ritchie, Scotland
George Neil Stewart, Scotland
John Clarence Webster, Canada

[1] See footnote, page 637.

[2] The names of those who received Gold Medals prior to 1859 will be found in the List of Graduates in Medicine of the University of Edinburgh since its foundation, published in 1867, and the names of those who received Gold Medals from 1859 to 1888, both years included, will be found in the Historical Appendix to List of Graduates, published in 1889, pp. 128, 129.

1892.

George Sandison Brock, Scotland
Alex. Lockhart Gillespie, Scotland
William Aldren Turner, Scotland
Arthur John Whiting, England
Theodore Stacey Wilson, England

1893.

Francis Darby Boyd, Scotland
James Samuel Risien Russell, Demerara
James Lorrain Smith, Scotland
John Cleasby Taylor, England
William Ernest Francis Thomson, Scotland

1894.

Lewis Campbell Bruce, Scotland
William Menzies Hutton, Scotland
Gustav Mann, India
James Acworth Menzies, Scotland
John Douglas Stanley, Ireland

DOCTORS OF MEDICINE, WITH THE TITLES OF THEIR THESES, WHO GRADUATED ON 1ST AUGUST 1894.

*** *Obtained Gold Medals for their Dissertations.*
** *Deemed worthy of competing for Gold Medals.*
* *Commended for their Dissertations.*

* Douglas Hamilton Anderson, England, M.B., C.M., 1887. The Ætiology of Acute Rheumatism.

** Richard James Arthur Berry, England, M.B., C.M., 1891. The Vermiform Appendix: its Anatomy, Macroscopic and Microscopic; Physiology, Pathology, and Surgery. An original and experimental research.

Francis Leonard Brown (M.A.), France, M.B., C.M., 1890. The Sulphur Springs of Béarn and Bigorre.

*** Lewis Campbell Bruce, Scotland, M.B., C.M., 1889. Effect of Thyroid Feeding in some forms of Insanity.

5 Robt. Cochrane Buist (M.A.), Scotland, M.B., C.M., 1888. Acute Liver Atrophy.

* James Cameron, Scotland, M.B., C.M. (with Second-Class Honours), 1887. Paranoia.

John William Compton, England, M.B., C.M., 1891. The Medical Aspect of Conventual Life.

Henri Dardenne, Mauritius, M.B., C.M., 1889. Fibrino-Plastic Bronchitis.

* Harold Roberts Lloyd Davies, England, M.B., C.M., 1891. Rheumatoid Arthritis.

10* John Russell Drummond, India, M.B., C.M., 1888. The Intestinal Antiseptic Treatment of Ceylon Sore Mouth. (*In absentiâ.*)

* Frank Ashby Elkins, England, M.B., C.M., 1888. Remarks on twenty-eight cases of Adult Female General Paralysis admitted to the Royal Edinburgh Asylum during the five years 1889 to 1893.

* Andrew Elliot (M.A.), Scotland, M.B., C.M., 1888. Transfusion, with Special Reference to Intravenous Infusion of Saline Solution.

Samuel Elliot, Scotland, M.B., C.M., 1890. An Account of an Epidemic of Enteric Fever, in its Diagnostic, Therapeutic, Dietetic, Etiological, and Sanitary Aspects.

Owen Foulkes Evans, Wales, M.B., C.M., 1890. Hæmatemesis; its Various Causes, Symptoms, Diagnosis, and Treatment.

15 Horace Nathaniel Everard, England, M.B., C.M., 1880. On Diphtheria. (*In absentiâ.*)

John Alfred Ewan (M.A.), Scotland, M.B., C.M., 1888. The Influence of Sex and Heredity in the Causation of Mental Disease; and a Short Account of the Insanity of Adolescence.

** Ernest Cotton Fischer, Scotland, M.B., C.M., 1891. Toxic Amblyopia.

Francis Troughton Foster, New Zealand, M.B., C.M., 1891. The Manufacture of White Lead, recent Hygienic Improvements. Clinical History of a few cases of Plumbism. Suggestions for Improving Health of White Lead Workers.

William Gordon, England, M.B., C.M., 1892. The Morbid Condition in Disease.

20 Benjamin Griffiths, Wales, M.B., C.M., 1884. Observations on Antifebrin or Acetanilid.

Alfred Joseph Haslam, England, M.B., C.M., 1891. Occult Glanders: Some Unrecorded Symptoms.

Edgar Hawkins (M.A.), England, M.B., C.M., 1892. Some Introductory Notes concerning the nature of Rheumatism.

Sidney Hillier, England, M.B., C.M., 1891. A New Epidemic Skin Disease.

*** William Menzies Hutton, Scotland, M.B., C.M., 1891. Empyema, with Special Reference to Sudden Death and Treatment.

25 John Lowthian Jackson, England, M.B., C.M., 1883. Anæsthetics and their Administration.

John William Johnston, Scotland, M.B., C.M., 1882. Counter-irritation; with Special Reference to the Theories on which its Employment is based.

Roger Kirkpatrick, India, M.B., C.M., 1881. Malaria; its Nature and Origin. (*In absentiâ.*)

** James Lamond Lackie, Scotland, M.B., C.M. (with First-Class Honours), 1889. The Clinical and Pathological Features of Hydro-Pyo- and Hæmato-Salpinx.

Edward Sidney Littlejohn (B.A.), Canada, M.B., C.M., 1892. A Study of Asthma. (*In absentiâ.*)

30* James M'Donald, Wales, M.B., C.M., 1888. Pelvic Hæmatocele, mainly concerning its Etiology.

John Robertson M'Intosh (B.A.), Canada, M.B., C.M., 1888. Some Forms of Increased Hardness of the Eyeball associated with

Syphilis and their Treatment.

* Henry John Mackay, Scotland, M.B., C.M., 1884. Clinical and Pathological Observations in Nervous Disease.

Harry Valentine Mackenzie, India, M.B., C.M., 1890. Astigmatism.

John Macdonald M'Lennan (M.A.), Scotland, M.B., C.M., 1885. Physiology considered in Relation to Human Knowledge and Responsibility.

35 David Macmillan (M.A.), Scotland, M.B., C.M., 1891. Periostitis and Necrosis as sequelæ of Typhoid Fever.

Adam Henry Muir Macmorran, Scotland, M.B., C.M., 1892. The Interscapulo-Thoracic Amputation.

Archibald Macqueen, Scotland, M.B., C.M., 1884. Puerperal Fever.

*** Gustav Mann, India, M.B., C.M., 1892. What Histological Changes do Functional Activity and the Consequent Restorative Metabolism Produce in Nerve Cells?

* George Balfour Marshall, Scotland, M.B., C.M. (with Second-Class Honours), 1890. The Pathological Anatomy of Tubal Gestation.

40 Alexander Jamieson Meikle, Scotland, M.B., C.M., 1892. The Diagnosis of Typhoid Fever.

** Alexander Kennedy Melville, Scotland, M.B., C.M., 1891. Hypnotism and its Relations to Medicine.

*** James Acworth Menzies, Scotland, M.B., C.M., 1890. Methæmoglobin.

Arthur William Thomas Flintoff Mickle, England, M.B., C.M., 1882. Febrile Conditions during the Puerperium.

William Cunningham Milroy (M.A.), Scotland, M.B., C.M., 1891. Epidemic Influenza, with Special Reference to the Last Two Epidemics.

45 John Gay Moffat, Scotland, M.B., C.M., 1888. Post-partum Hæmorrhage.

* John Douglas Ross Munro, England, M.B., C.M., 1891. Analysis of 100 Cases of Injury to the Eye seen in a General Hospital in a Colliery District, with Special Notes on the Treatment of Certain Cases.

Charles David Musgrove, England, M.B., C.M., 1888. Analysis of the Mind in Cases of Mental Stupor, with a New Classification. (*In absentiâ.*)

Thos. Llewelyn Parry, Wales, M.B., C.M., 1891. Personal and Other Observations on Malarial Fevers. (*In absentiâ.*)

James Maclagan Reid, Scotland, M.B., C.M., 1890. A Contribution to the Pathology of the Cell.

50* John Brooke Ridley, England, M.B., C.M., 1855. Clinical Observations on Typhoid Fever.

* Samuel Allan Shiach, Scotland, M.B., C.M., 1891. Smallpox Vaccination, Re-Vaccination with Special Reference to the Bradford Epidemic of 1893.

* Edmund Moody Smith, England, M.B., C.M., 1888. The Trustworthiness of the *Present-day* Preparations of the Digestive Ferments, as Tested Experimentally and Clinically; with Some Introductory Comments upon the Recent Physiology connected with the subject.

James Smith, Scotland, M.B., C.M., 1888. Abdominal Cases Illustrating the Relation of Medicine and Surgery.

*** John Douglas Stanley, Ireland, M.B., C.M., 1889. Splenic Anæmia; its Clinical Course and Pathology.

55 Kenneth Trevor Stewart, England, M.B., C.M., 1889. Beri-beri.

George Temple Tate, England, M.B., C.M., 1888. Some Considerations to be taken by a Medical Officer of Health in the Construction of a Fever Hospital for a Town or District of 50,000 Inhabitants, the Population being on the Increase.

** Arthur Logan Turner, Scotland, M.B., C.M., 1889. Internal Derangement of the Knee Joint: a Pathological and Clinical Study.

* George Wade, Scotland, M.B., C.M., 1887. The Thyroid Gland, and its Relation to Myxœdema and its Treatment.

* James Curtis Whyte, Scotland, M.B., C.M., 1891. Some Complications of Chronic Suppuration in the Middle Ear.

60 Harry Townshend Wickham, England, M.B., C.M., 1888. On the Difficulties connected with the Feeding of Infants.

David Wield (M.A.), Scotland, M.B., C.M., 1891. Acute Follicular Tonsillitis.

* John Johnstone Wilson, Scotland, M.B., C.M., 1889. Hæmophilia.

Richard Wyse (M.A.), Scotland, M.B., C.M., 1889. Some Practical and Scientific Uses of Palpation and Auscultation.

64* William Young, New Zealand, M.B., C.M., 1892. Tuberculosis of the Urinary Bladder.

GRADUATES (M.B., C.M.) WHO HAVE PASSED THE EXAMINATIONS WITH HONOURS FROM 1889 TO 1894, BOTH YEARS INCLUDED. [1]

1889.

Class I.

Robert Oswald Adamson (M.A.), Scotland

John William Crerar, Scotland

William Fred. Farquharson, Scot.

James Lackie, Scotland

Jas. Hill Williamson Laing (M.A., B.Sc.), Scotland

Hamilton Graham Langwill, Scot.

[1] For names of those who received the Degrees with Honours prior to 1889, see Historical Appendix to List of Graduates of the University, published in 1889, pp. 129-132.

Alexander Maclean, Scotland
Eustace G. Pilgrim, Barbados
Wm. Gordon Woodrow Sanders, Scotland
James Andrew Thyne, Scotland
George Wilkinson, England

Class II.

Robert Dunlop Reid Allison, Scot.
William Everett, England
George Alfred Walter, England
Colin Gordon, England
Ewan John Maclean, Wales
James Monteith, Scotland
Benjamin Sweeten, Scotland
C. N. C. Wimberley, Scotland

1890.

Class I.

Charles James Whitehead Dixon, England
Carstairs Cumming Douglas, Scotland
Gerald Fitzgerald, Scotland
Robert Main Horne, Scotland
Colin Forbes Lees, Scotland
William Paterson, Scotland
George William Thompson, La Plata
William Kerr Walker, Scotland

Class II.

Ed. H. Alexander, New Zealand
Robert Brown, Scotland
John Wheeler Dowden, Ireland
George Balfour Marshall, Scotland
Arnold W. Williams, England

1891.

Class I.

John Wardle Bone, England
Wm. Blackley Drummond, Scot.
George Elder, Scotland
Edward Barnard Fuller, Africa
Henry Baker Hall, England
George Hennan, Scotland
Herbert Saunders Wansbrough Jones (B.Sc.), Wales
Harry Rainy (M.A.), Scotland

Class II.

Robt. J. Ashton (B.A.), England
Robert Cran, Scotland
Frederich Wilhelm Eurich, Saxony
David J. Mackenzie (M.A.), Scot.
John Orr, Scotland
David Stuart, Scotland
Wm. J. Walker (B.A.), Australia
Neish Park Watt (M.A.), Scotland
John Thos. Wilson, Tasmania

1892.

Class I.

Alexander Brownlie, Scotland
Charles Cromhall Easterbrook, (M.A.), England
George Home, New Zealand
Lim Boon Keng, Singapore
Robert Murray Leslie (M.A., B.Sc.), Scotland
Donald Macaulay (M.A.), Scot.

Class II.

Alexander Douglas (M.A.), Eng.
Daniel Charles Edington, Scot.
John James Evans, Wales
Arthur Fells, England
James Stewart Fowler, Scotland
Robert Walker Gray, Scotland
Robert John Johnston, Scotland
Geo. Wm. F. Macnaughton, Scot.
Philip Oscar Malabre, Jamaica
Peter William Shaw, Scotland
Alfred George Talbot (B.A.), New Zealand
George Templeton, Scotland

1893.

Class I.

Charles Crerar, Scotland
John Buchanan Duff, Scotland
Alex. M. Easterbrook, Scotland
Wm. E. Fothergill (M.A., B.Sc.), England
Robert Hutchison, Scotland
Robert H. Makgill, Scotland
Jas. V. Paterson, M.A., Scotland
David W. Sutherland, Australia

Hugh Walker (M.A.), Scotland
D. A. Welsh (M.A.), Scotland

Class II.

William Randolph Center, Scot.
Robert Craig Dun, Scotland
George Harry Dupont, England
Charles Alfred Hogg, Tasmania
Charles Kerr, Scotland
James G. Macnaughton, Scotland
W. M'D. Selby, Scotland
St John Stanwell, England
John Steed, England
John Tennant (M.A.), Scotland
John Brown Yeoman, Scotland

1894.

Class I.

James Martin Beattie, (M.A.), New Zealand
Evan John Hewat Fraser, England
George Brooke French, England
Thomas Gibson (M.A.), Ireland
John Rutherford Gilmour, Scotland
Neil MacVicar, Scotland
William Anderson Stephen (M.A.), Scotland
James Purves Stewart (M.A.), Scotland

Class II.

Robert William Beesley, England
Robert Ward Briggs, England
Alexander Keith Campbell, Scot.
Thomas H. C. Derham, England
Charles Francis Lassalle, W. Indies
James Donald Macrae, Scotland
Hezlett Hamilton Marshall, Australia
Arthur Maxwell Nicholson Pringle, Scotland
Walter Russell Strapp, Natal

BACHELORS OF MEDICINE AND MASTERS IN SURGERY.

1ST AUGUST 1894.

Small CAPITALS *indicate First-Class Honours.*

Italics Second-Class Honours.

William David Adams (M.A.), Scotland
Charles Henry Adamson, Australia
Charles Crawford Aitken, Scotland
Charles James Hill Aitken, Scotland
George Nelson Alexis, West Indies
Samuel Hoslett Browne Allison (B.A.), Ireland
John William Anderson, New Zealand
Robert Yuill Anderson, Scotland
Juan Carlos Atkinson, Chili
Charles Ayres (B.A.), Australia
Andrew Balfour, Scotland
Thomas Mackenzie Bartlett, Jamaica
Henry Bateson, England
JAMES MARTIN BEATTIE (M.A.), New Zealand
Robert William Beesley, England
William Bethune, Scotland
Reginald St George Smallridge Bond, England
William Henry Borrie, New Zealand
Alexander Bremner, Scotland
Robert Ward Briggs, England
Benjamin William Broad, England
Henry Reynolds Brown (M.A.), Scotland
Robert Tennant Bruce, Scotland

William Henderson Bryce, Scotland
Morton Burnet, Scotland
David John Stewart Burt, New Zealand
Alexander John Campbell, Scotland
Alexander Keith Campbell, Scotland
Charles Seaward Cantrell, New Zealand
Osmund Harry Chapman, England
Philip Francis Chapman, England
Ronald Murray Clark, Scotland
Robert Cochrane (M.A.), Scotland
James Allan Coutts, Scotland
William Bannerman Craig (M.A.), Scotland
David Macquorn Rankine Crichton, Scotland
Henry Mair Crosby, Tasmania
Alexander Dall (M.A.), Scotland
Robert Thomas Davidson, Scotland
George Alexander Dickson, Scotland
Ernest Ralph Dodds, England
Evelyn Arthur Wallace English, England
Thomas Evans, Wales
John Hoggan Ewart, India
Francis Harold Fairweather, England
Richard William Fell, England
James Fenton, Scotland
Peter Joseph Henry Ferguson, West Indies
Thomas Finlay, Scotland
John Smith Flett (M.A., B.Sc.), Scotland
John Vincent Forrest, Antigua
Evan John Hewat Fraser, England
Simon Fraser, Scotland
William Charles Fraser, Scotland
George Brooke French, England
John William Geddes, Scotland
Andrew John Gibson, Scotland
Thomas Gibson (M.A.), Ireland
Herbert Hope Gill, England
John Rutherford Gilmour, Scotland
James Oliphant Goldie, England
Alexander Donald M'Kenzie Grant, Scotland
Lachlan Grant, Scotland
William Young Grant, Scotland
George Douglas Gray, Scotland
James Gray, England
Herbert Melvill Green, England
John Duncan Gregorson, Scotland
Robert Grieve, England
William Haig, Scotland
Frederick Harwood Hardman, England
John Henderson, Scotland
Ronald Tydd Herdman, Scotland
James Edgar Hewlett, England
Arthur Heys, England
Edwin Richards Holmes, England
Godfrey Hudson, England
Percy Theodore Hughes, England
John Kay Jamieson, Scotland
Thomas Hill Jamieson, Scot.

David Andrew Johnstone, England
Walter Edward Johnstone (M.A.), Scotland
James Havard Jones, Wales
Thomas Henry Jones, England
85 John William Keighley, England
Bruce Curtis Kelly, England
Thomas Bernard Kenny, West Indies
Alexander Edward Kidd, Scotland
David Fraser Laidlaw, Australia
90 George Campbell Laing, Scotland
John Adolphus Laing, New Zealand
Charles Francis Lassalle, West Indies
John Lawrie, Scotland
Robert Eddowes Legat, Scot.
95 George Frederick Leicester, England
William Leslie, Scotland
Joseph Maurice Lincoln, Mauritius
Thomas Gibson Lusk, Ireland
Donald Gregor MacArthur, Scotland
100 Alexander James MacDougall, Scotland
Cecil John Read MacFadden, Ireland
John Alexander Macfarlane, Trinidad
Alexander Joseph M'Ilroy, New Zealand
John Maciver, Scotland
105 John Finlayson Macphail (M.A.), Scotland
James Fraser Macpherson, Scotland
James Donald Macrae, Scot.
Colin M'Vicar (M.A.), Scot.
William Mailer, Scotland
110 Harry Banbury Mapleton (B.A.), England
Hezlett Hamilton Marshall, Australia
William Robert Martine, Scotland
Felix Oswald Newton Mell, India
James Morris Menzies, Scot.
115 Sidney Messulam, Turkey
Archibald Mitchell, Scotland
William Mitchell, Scotland
Keith Waldegrave Monsarrat, England
Ernest Cottew Moore
120 Robert Owen Morris (M.A.), Wales
Robert Stewart Mowat, Eng.
John Reid Muir, Scotland
Harold Valdemar Münster, Australia
George Alexander Murray, Scotland
125 Taraveth Madaven Nair, India
John Nicholson, Scotland
Frank Binfield Oliphant, Eng.
David Orr, Scotland
Corbet William Owen, Wales
130 Arthur Aubrey Palmer, Australia
Rodie Parkhurst, England
George William Simla Paterson, Scotland
John Barnes Pearson, England
Thomas Cunningham Penfold, England
135 Arthur Patrick Percival, England
Joseph Michael Pereira, India
Tom Pettey, England
Charles Edward Potter, Scotland
David Rees Price, Wales
140 *Arthur Maxwell Nicholson Pringle*, Scotland
Frank Grégoire Proudfoot (M.A.), Scotland

Edward de Carle Prout, England
Philip Melancthon Ragg, England
Albert Reid, Scotland
William Riach, Scotland
John Kildahl Richards, Australia
Adam Richardson, Scotland
William Howell Robertson, Scotland
Alexander Rodger, Scotland
Lachlan Rose (M.A.), Scot.
Hugh Ross, Scotland
George Herbert Ruston-Harrison, England
James Mair Rutherford, Scot.
James Scott, Scotland
Thomas Marshall Scott, Scotland
Peter John Sharp, Scotland
George Shaw, Scotland
Thomas David Stuart Shaw, England
Thomas Redpath Scott Sibbald, Scotland
Charles Morton Simpson, Scotland
Stewart Sherwood Skinner (B.A.), Canada
Philip Douglas Smith, Tasmania
Robert William Innes Smith, Scotland
William Edward Smith, Scot.
Alexander Milroy Stafford, Scotland
John Graham Standing, Eng.
Wm. Anderson Stephen (M.A.), Scotland
Murray Babington Steuart, Scotland
Hugh Steven, Scotland
Walter Lowther Stevenson, Ireland
James Purves Stewart (M.A.), Scotland
Walter Russell Strapp, Natal
John Struthers, Scotland
Frederick William Taylor, England
William Sanderson Steele Titterton, England
Matthew Livingstone Mitchell Vaudin, England
Gideon Daniel de Waal, Cape Colony
James Samuel Hourston Walker, Scotland
John William Thompson Walker, Scotland
Frederick Thomas Walmsley, England
Francis Ward, England
James Watson, Scotland
Edward Croft Watts, England
Edmund Thomas Whitaker, England
Alexander Whytt, Scotland
Edward Davies Williams, Wales
James M'Keachie Wishart, Scotland
James Julius Hedley Wood, India
Herbert Miall Woodhead, England
Robert John Thom Wright (M.A.), Scotland
George Pratt Yule, Scotland

27th October.

William Black Anderson, Scotland
William Smeaton Anderson, Scotland
William Bannerman, Australia
Guy Beatty, Ireland
William Broster Broster, Eng.

Charles Harvey Hinrich Cazalet, England
Joseph Cookson, England
Alfred John Copplestone, England
Alfred Cowper (M.A.), Scotland
Robert Pitillo Dawson, Scotland
Thomas Hanson Crossfield Derham, England
Harry Winterton Dun, Eng.
Henry Pritchard Elliot, Eng.
David Anderson Farquharson, Scotland
Joseph Arthur Featherstone, England
Thomas Dewar Forbes, Scotland
Harvie Forrester, Scotland
Arthur Graham Foljambe Forster, England
Walter Tipping Brook Fox, England
Robert Mylcraine Freer, Eng.
George Edward Gabites (B.Sc.), New Zealand
Thomas Henry Gee, England
Thomas Anderson Glover, Scotland
Joseph Ernest Good, Australia
Sydney Herbert Hall, England
Samuel Priestly Hyam, Australia
Alfred Kaye Jarratt, England
James Graham Kay, England
Herbert William Graham Lander, England
Horace Lake Lowis, England
John Coull Mackenzie, Scotland
William Hector Mackenzie, Scotland
John Mackinnon, Scotland
Neil Macvicar, Scotland
Charles Henry Dugald Moore, England
James Muir Nelson Paton, Scotland
James Philip, Scotland
George Brading Pieterson, South Africa
John Cadwaladr Rees, Wales
Joseph James Ross, Scotland
Richard Adolphus Ross, Ireland
Alexander Selkirk, Scotland
Charles Railton Sheward, England
Thomas Sidebottom, England
Charles Telfer, England
Frederic Vincent Thomas, England
Thomas Edgar Watson, Ireland
Joseph Richard Williams, Wales
William Hugh Williams, Wales

26th January 1895.

William Gordon Alexander, Scotland
George Herbert Drury, England
Malcolm M'Larty, Scotland
Arthur James Meyrick Paget, England
Thomas Roberts, Wales
John Mearns Taylor, Newfoundland

17th April.

James Andrew Gibson, Scotland
Thomas Smith, England

Class Prize and Honours Lists.

SUMMER SESSION, 1894.

BOTANY.

First-Class Honours.—1. Alfred C. Sandstein, New Zealand; 2. James Young Simpson, M.A., Edinburgh; 3. Andrew Hunter, Edinburgh; 4. Gavin Liddell, New Zealand; 5. R. W. T. Ewart, Dumfriesshire; 6. Y. A. Djedjizian, Adabazar; 7. G. F. Ashby, Birkenhead; Clarence King, Demerara; and J. H. Rhodes, Kendal —equal; 10. J. Luckhoff, Cape Colony; and Charles H. Watson Cape Colony—equal.

Second-Class Honours.—12. T. B. Cornall, Preston; and George Thomson, Edinburgh—equal; 14. T. A. Sprague, Edinburgh; 15. J. M. Campbell, Montrose; 16. J. Cameron, Laurencekirk; and Frank J. Gray, Edinburgh—equal; 18. L. Kingsford, New Zealand; 19. James Masson, M.A., Edinburgh; 20. Charles F. Noble, Inverness; 21. George Dick, Wick; and W. P. Meldrum, Mauritius—equal; 23. William N. Barker, Cupar-Fife; and Ward Smith, Leek—equal; 25. W. E. Hutchison, India; G. E. J. King, Cheltenham; and John Jeffrey, Jedburgh—equal; 28. John A. C. Smith, St Nicholas; John M. Bowie, Edinburgh; and T. Livingstone, Stanhope—equal; 31. Maxwell MacKelvie, Argyleshire; T. R. Matthews, Jamaica; J. M. Nisbet, Berwickshire; and Arthur W. Russell, Cupar-Fife—equal; 35. Hugh M'Calman, Tarbert, Lochfyne; and William Park, Orkney—equal; 37. A. Leonard Anderson, New Zealand; and Herbert C. Keun, Singapore—equal; 39. G. H. Menzies, Inverkeithing; Hubert D. Shepherd, Wigan; and David Wardrop, Cumnock—equal; 42. J. J. Galbraith, Inverness; Alfred H. Griffith, Bedford; Geo. G. Hay, Abernethy; and P. Lonsdale M'All, Leeds—equal; 46. John Alcindor, Trinidad; C. A. B. Horsford, St Kitts; G. A. Mackay, Durham; and William Rogers, Wales—equal; 50. Robert King, Edinburgh; 51. Leonard D. H. Baugh, Jamaica; Cyril H. Durrant, West Indies; A. C. Kirkpatrick, Antrim; and James Orr, Hawick—equal; 55. Alex. M. M'Intosh, Edinburgh; and Charles M. Pearson, Edinburgh—equal; 57. E. Archer Brown, Queenstown, South Africa; 58. W. Bennett, Clonakilty; Launcelot Bruce, Brechin; William Darling, Edinburgh; J. A. Macdonald, Inverness-shire; and John M. Macdonald, Inverness-shire—equal.

PRACTICAL BOTANY.

Class A.

First-Class Honours.—1. T. B. Gornall, Preston; 2. John M. Macdonald, Oban; 3. Ward Smith, Leek; 4. H. G. Carlisle, Liverpool; and J. M. Nisbet, Berwickshire—equal.

Second-Class Honours.—6. A. Hamilton Wood, Falkland; 7. Alfred C. Sandstein, New Zealand; 8. E. Archer-Brown, Queenstown; and Maxwell MacKelvie, Campbelltown—equal; 10. J. Luckhoff, Cape Colony; W. J. Stuart, M.A., Scotland; and T. Livingstone, Stanhope—equal; 13. J. W. Mackenzie, Inverness; George Haddow, Falkirk; P. Hagart Henderson, Coupar-Angus; Andrew Hunter, Edinburgh; and A. K. Traill, Jeypore—equal; 18. T. R. Matthews, Jamaica; and W. Rogers, Wales—equal.

Class B.

First-Class Honours.—1. Charles M. Pearson, Edinburgh; 2. Hubert D. Shepherd, Wigan; 3. A. Alisebrook, Notts; 4. G. A. Mackay, Durham; 5. John Cameron, Laurencekirk; and L. C. Maclagan Wedderburn, Forfar—equal.

Second-Class Honours.—7. R. W. Thomas Ewart, Dumfriesshire; 8. G. F. Ashby, Birkenhead; 9. Y. A. Djedjizian, Adabazar; 10. L. Kingsford, New Zealand; 11. David A. Callender, Edinburgh; and George G. Hay, Abernethy—equal; 13. George Arthur Rorie, Dundee; and Harold E. Wareham, Guildford—equal; 15. T. J. T. M'Hattie, Antigua; and A. R. Smith-Shand, Aberdeen—equal; 17. William N. Barker, Cupar-Fife; F. J. Gray, Edinburgh; and Leonard J. L. Pavillet, London—equal; 20. J. J. Galbraith, Inverness; and Alan P. Slater, Leeds—equal; 22. A Leonard Anderson, New Zealand; George Dick, Wick; and J. F. Martin, Limerick—equal.

For Microscopical Preparations made during the Session.

First-Class Honours and Prizes.—A. Allsebrook, Notts; J. J. Galbraith, Inverness; H. D. Shepherd, Wigan.

Second-Class Honours.—Andrew Hunter, Edinburgh; T. B. Gornall, Preston.

For Drawings illustrating Work done during the Session.

First-Class Honours.—John Cameron, Laurencekirk; William Rogers, Wales; J. Luckhoff, Cape Colony—*Prizes;* T. Livingstone, Stanhope.

Second-Class Honours.—Alexander Hunter, Ayr; J. W. N. Thomson, Caddalore.

ISAAC BAYLEY BALFOUR, M.D., D.Sc., *Professor.*

ZOOLOGY.

First-Class Honours.—1. A. C. M'Gilchrist; 2. C. H. Watson, B.A.; 3. J. A. Small (*Medallists*); 4. Clarence King.

Second-Class Honours.—5. D. Wardrop; 6. J. M. Bowie, A. D. Fordyce, L. C. Maclagan-Wedderburn, and A. E. B. Wood—equal; 10. W. N. Barker; 11. Andrew Hunter, William Park, M.A., and W. J. Stuart, M.A.—equal; 14. William Rogers; 15. D. M. Aitken and C. F. Noble—equal; 17. J. Pender and J. A. C. Smith—equal; 19. T. R. Matthews and H. Wade—equal; 21. J. M. Gray and L. J. L. de Pavillet—equal; 23. G. E. J. King, Thomas Livingstone, J. M. Macdonald, W. P. Meldrum, and R. M. Skinner—equal; 28. John Jeffrey and G. H. Menzies—equal; 30. A. Whittome; 31. J. C. Carr and H. E. Coghlan—equal.

PRACTICAL ZOOLOGY.

First-Class Honours.—1. Arthur Allsebrook; 2. R. M. Skinner; 3. A. M'Gilchrist (*Medallists*); 4. Andrew Hunter; 5. J. M. Gray and C. H. Watson—equal.

Second-Class Honours.—7. W. Bennet, J. Pender, and J. A. Small—equal; 10. A. D. Fordyce; 11. D. B. King and Ph. E. Millard—equal; 13. A. J. Spiganovicz, A. K. Traill, and L. C. Maclagan-Wedderburn—equal.

J. C. EWART, M.D., *Professor.*

PRACTICAL CHEMISTRY.

First-Class Honours.—1. W. Moncrieff Paul, Dollar (*Medallist*); 2. A. L. Anderson, New Zealand.

Second-Class Honours.—3. T. C. Fraser, Edinburgh; 4. T. A. Sprague, Edinburgh; 5. G. F. B. Simpson, Edinburgh; 6. G. A. Mackay, Durham; J. Turner, Portobello; and A. S. Whytock, Fifeshire—equal; 9. A. G. Boyden, Penzance; 10. A. G. Hamilton, Chester; 11. T. H. B. Scott, Belfast.

ALEX. CRUM BROWN, M.D., *Professor.*

PHYSICS.

First-Class Honours.—1. J. J. Galbraith and A. C. Sandstein (*Medallists*)—equal; 3. Y. A. Djedzijian, H. C. Keun, and D. MacVean—equal; 6. G. D. Laing and J. R. Laing—equal; 8. J. H. Rhodes; 9. T. B. Gornall and J. Masson—equal; 11. G. de Labat and M. MacKelvie—equal.

Second-Class Honours.—13. E. A. Brown; 14. John Alcindor and H. G. Carlisle—equal; 16. R. M. Dalziel, D. J. Hughes, J. Luckhoff, and C. M. Pearson—equal; 20. G. Haddow and M. Macleavy—equal; 22. B. J. Courtney, L. Crossley, and A. A.

Gunn—equal; 25. A. Mouat, A. M. M'Intosh, and H. D. Shepherd—equal; 28. D. A. Callender, W. Craig, P. H. Henderson, C. Melville, and R. Ritchie—equal; 33. T. C. Caldwell, E. G. French, W. M. Mackay, J. G. Mitchell, E. C. Peake, and D. Robertson—equal; 39. J. Craig, P. S. Hopkins, and G. Murray —equal.

P. G. TAIT, M.A., *Professor.*

PRACTICAL ANATOMY.

SENIOR STUDENTS.

First-Class Honours.—1. C. M. Cooper, Somersetshire; J. D. Slight, M.A., Portobello; and W. W. Wood, Leith (*Medallists*)—equal; 4. J. B. Cusine, Glasgow, and A. H. Watt, Edinburgh—equal; 6. A. J. Hughes, Wales; C. H. Phillips, Barbadoes; and F. M. Willcox, Adelaide—equal; 9. R. K. Howden, Natal; 10. P. T. Herring and G. C. Low, Forfarshire—equal; 12. T. R. W. Armour, Edinburgh; T. M. Callender, Edinburgh; and G. B. Serle, East Linton—equal; 15. S. J. Gilfillan and Edwin Matthew, Aberdeen—equal; 17. William Finlay, France; W. F. Harvey, S. India; W. J. H. Hislop; A. L. Low, Kirkwall; and J. D. M'Crindle, Ayrshire—equal; 22. B. M. Bone, Lancaster, and W. C. Rowlands, Brecon—equal; 24. J. C. Hastings, Co. Donegal; 25. Henry Halton, Carlisle; 26. James Graham, Joppa; D. T. R. Jones, S. Wales; J. T. Titterton, Staffordshire; and J. R. Hall-Walker, Edinburgh—equal; 30. A. Y. Greenwood, India, and A. B. MacCarthy, Dorset—equal; 32, Hugh Douglas, Newcastle; 33. Charles Porter, Edinburgh; 34. Mowbray Jackson, Leith, and Lawrence Ker, Leicester—equal; 36. A. E. Williams, Chester.

Second Class Honours.—37. F. T. Wills, George Town, Demerara; 38. J. G. Bailey, Worcester; 39. Robert Mudie, Dundee; 40, W. B. Thain, Dundee; 41. J. R. Williamson, Surrey; 42. W. H. Brendon, Plymouth, and Donald Maclean, America—equal; 44. T. S. Harper, Hawkhurst.

JUNIOR STUDENTS.

First-Class Honours.—1. Thomas Biggam, Wigtownshire; Duncan Forbes, Perth; and John Malcolm, Caithness—equal (*Medallists*); 4. A. A. Gunn, Strathpeffer; George Lyon Argyleshire; J. H. Rhodes, Kendal; R. F. M'Nair Scott, Singapore; and W. R. Somerset, Derbyshire—equal; 9. D. V. M'Intyre, Dundee; 10. J. D. Comrie, M.A., Edinburgh; and L. H. B. Mills, Norwich—equal; 12. R. W. T. Ewart, Moffat; Andrew Gilmour, Edinburgh; Patrick Kinmont, Perthshire; Clarence King, Demerara; and W. M. Paul, Dollar—equal; 17. J. R. Anderson, Orkney;

Robert Cumming, Montrose; A. T. Gailleton, Perth; A. C. M'Gilchrist, Islay; A. B. MacCarthy, Dorset; G. F. B. Simpson, Edinburgh; and Edgar Somerville, Staffordshire—equal; 24. V. G. Alexander, Scotland; D. V. M. Adams, Lanarkshire; Alex. Fordyce, Fauldhouse; and R. W. MacKenna, Dumfries—equal; 28. Robert Gibson, Wigtownshire; and J. M. Reid, Edinburgh—equal; 30. C. S. Brebner, Darlington; and J. M. Gray, Perthshire—equal; 32. J. M. Cuthbert, Edinburgh; and A. H. Pirie, Dundee—equal; 34. A. Dingwall Fordyce, Fordyce; 35. Robert Crawford, Bradford; David Clow, Kelso; Alex. Goodall, Ayrshire; E. F. M. Neave, Dundee; and W. J. Veecock, British Guiana—equal; 40. John M'Gibbon, Edinburgh; and W. E. J. Wallis, Aldershot—equal; 42. G. N. W. Thomas, Dartmouth; 43. J. W. Falconer, Forfar.

WM. TURNER, Kt., M.B., D.C.L., *Professor.*

PRACTICAL PHYSIOLOGY.

First-Class Honours.—1. E. H. Jones, Ruthin; 2. A. J. Orchard, New Zealand; 3. C. M. Cooper, Somersetshire; 4. A. H. Pirie, Dundee (*Medallists*); 5. J. R. Anderson, Orkney; 6. P. T. Herring, New Zealand; 7. W. R. Mackenna, Dumfries; 8. G. Lyon, Ardlamont; 9. M. Corry, Donegal; L. Kingsford, New Zealand; and R. F. M'Nair Scott, Singapore—equal.

Second-Class Honours.—12. R. J. Dick, Dunbar, and J. H. Gordon, Mid-Lothian—equal; 14. G. S. Small, Brechin; 15. J. Allison, Lanarkshire; R. C. Cunningham, Ireland; and A. G. Worrall, Dundee—equal; 18. R. C. R. Aldren, Malvern; C. S. Brebner, Darlington; W. Hamilton, Middlesborough; and R. H. Walter, Somersetshire—equal; 22. W. Bell, Barrow-in-Furness; W. H. Fowler, Edinburgh; J. Johnstone, Carlisle; and W. O. Williams, North Wales—equal; 26. T. Biggam, Wigtownshire; and W. Burns, Forfarshire—equal; 28. J. Malcolm, Caithness; and E. F. W. Neave, Dundee—equal; 30. J. S. Fraser, Cupar-Fife; and H. Y. Taylor, Edinburgh—equal; 32. R. Cumming, Montrose; C. W. Donald, Ormiston; and R. W. T. Ewart, Dumfriesshire—equal; 35. G. Gatenby, Stockton-on-Tees, and C. M. Robertson, Edinburgh—equal; 37. D. Forbes, Perth; J. M. Reid, Edinburgh; and T. F. Wolfe, Cork—equal; 40. J. R. Hall Walker, Edinburgh; 41. P. Kinmont, Errol; 42. R. B. Black, Edinburgh; 43. J. F. Falconer, Elgin; 44. J. Donaldson, Lanarkshire; F. Lasbrey, Staffordshire; and G. R. Riddell, East Lothian—equal; 47. W. G. Heath, West Indies; T. A. Price, Queensland; and J. W. Whitecross, Edinburgh—equal; 50. T. Jenkins, Morayshire; and M. Johnston, Uraguay—equal; 52. D. V. M'Intyre, Dundee; 53. A. P. L. Brown, England; W. S.

Eaton, Cumberland; A. H. Keun, Singapore; A. B. MacCarthy, Queenstown; T. D. M'Laren, Edinburgh; F. W. More, Caithness; J. A. Raeburn, Dollar; G. W. Smith, West Indies; W. R. Somerset, Derbyshire; and W. M. Wilson, Stockton-on-Tees—equal; 63. H. L. S. D. Belasco, British Guiana; L. Boyer, Lincolnshire; J. Stevenson, New Zealand; and A. E. J. Twigge-Molecey, Weston-super-Mare—equal; 67. S. Branch, West Indies; A. E. Burroughs, Southport; R. Crawford, Bradford; G. Fourie, Orange Free State; A. Gilmour, Edinburgh; W. Gorrie, Perth; J. T. P. Heatley, Northumberland; G. B. Hollings, London; J. W. Inglis, Perthshire; W. Martin, Ireland; H. G. P. Raeburn, Leith; G. N. W. Thomas, Dartmouth; and W. C. Wilson, India—equal.

WILLIAM RUTHERFORD, M.D., *Professor.*

PRACTICAL MATERIA MEDICA.

First-Class Honours.—1. George B. Serle, East Linton; and George S. Small, Brechin—equal; 3. P. T. Herring, New Zealand (*Medallists*); 4. Edwin H. Irwin, Armagh; 5. James R. Atkinson, Crewe; 6. Leonard Boyer, Lincolnshire.

Second-Class Honours.—7. W. Morrison Milne, Morayshire; 8. Thomas M. Callender, Leith; and John W. L. Spence, Smyrna—equal; 10. William Burns, Forfarshire; Patrick Kinmont, Perthshire; J. B. Cusine, Glasgow; and Charles M. Robertson, Dundee—equal; 14. Matthew Corry, Ireland; and George H. List, India—equal; 16. Jas. Fraser, Scotland; J. D. Slight, Portobello; and Walter S. Wight, Castlewellan—equal; 19. J. S. Fraser, Cupar-Fife; G. B. Hollings, London; George C. Low, Forfarshire; F. W. More, Caithness; G. Hearn Parry, Southampton; T. A. Ross, Edinburgh; and Robert Selby, Wigtownshire—equal; 26. Bertram R. Aldren, Malvern; William Finlay, France; and W. E. M'Kechnie, S. Africa—equal; 29. W. L. Martin, Edinburgh; Geo. W. Miller, Dundee; A. R. Wight, Castlewellan; and J. Rutter Williamson, Surrey—equal; 33. George Gatenby, Stockton-on-Tees; R. K. Howden, Natal; C. H. Johnson, Victoria; and James T. Scott, Selkirk—equal; 37. R. Hill, London; John Malcolm, Caithness; and Arthur G. Worrall, Dundee—equal; 40. Archibald F. Cameron, Forfarshire; Charles D. Lander, Bangalore; P. A. Leighton, Edinburgh; Edward F. M. Neave, Dundee; John T. Titterton, Staffordshire; and Andrew H. Watt, Edinburgh—equal; 46. Theodore R. W. Armour, Edinburgh; Frank J. H. Bateman, Norwich; Fred. M. Black, Broughty Ferry; Andrew Gibson, Paisley; J. Boyd Jamieson, Edinburgh; Thomas Jenkins, Morayshire; Edwin Matthew, Aberdeen; and Wm. Anderson, New Zealand—equal; 54. Wm. Hope Fowler, Edinburgh; W. R. Somerset, Derbyshire; Harold S. Ballantyne, Dalkeith; Thomas Biggam, Wig-

townshire; Richard E. Clarke, New Zealand; T. M. Coutinho, Bombay; Wm. Gorrie, Perth; and W. G. Heath, Antigua—equal; 62. James Donaldson, Lanarkshire; Angus Macleod, Stornoway; A. C. Renwick, Gloucester; and G. C. Thomas, Bath—equal; 66. James Allison, Lanarkshire; James Graham, Kirkintilloch; Thomas B. Shoolbread, Portsmouth; Harry M. Traquair, Edinburgh; and Walter J. Veecock, British Guiana—equal; 71. Joseph Cæsar, Dumfries, and Robert G. Riddell, East Lothian—equal; 75. Victor G. Alexander, Scotland; Oswald A. Gee, England; and Cyril H. Phillips, Barbadoes—equal; 76. Barclay Black, Edinburgh; George L. Chiene, Edinburgh; and John G. Forsyth, Eyemouth—equal; 79. Arthur J. Ryle, N. Wales; W. M. Wilson, Stockton; and G. Joseph Young, Yorkshire—equal; 82. C. M. Cooper, Somersetshire, and Alex. J. M'Clymont, Kirkcudbright—equal; 85. Alex. J. T. Allan, Portland; H. M. Bundey, Australia; R. C. Cuningham, Ireland; James F. Falconer, Elgin; and Wm. Martin, Ireland.

The following gentlemen were only able to attend three of the four class examinations, and obtained the following percentage:—John Stevenson, New Zealand, 73; Thomas D. M'Laren, Edinburgh, 72; H. Belasco, British Guiana, 70; J. H. P. Paton, Duddingston, 51.

THOMAS R. FRASER, M.D., *Professor.*

PRACTICAL PATHOLOGY.

SENIOR DIVISION.

First-Class Honours.—1. Edwin Bramwell, Edinburgh; 2. Richard Roycroft, Cork.

JUNIOR DIVISION.

First-Class Honours.—1. J. B. Cusine, Dunning; and P. T. Herring, New Zealand—equal; 3. J. Richards, N. Wales (*Medallists*); 4. Robert Selby, Wigtownshire; and E. H. Jones, N. Wales—equal; 6. Thomas M. Callender, Edinburgh; H. A. Orchard, New Zealand; and James Prentice, Fife—equal; 9. James Fraser, Scotland; and C. D. Lander, Bangalore—equal; 11. John Muir, Castle-Douglas; and W. Wilson Wood, Leith—equal; 13. E. B. Serle, East Linton; 14. A. F. Cameron, Forfarshire; R. K. Howden, Natal; and H. M. Traquair, Edinburgh—equal; 17. Thos. F. Johnston, Ormiston; and T. A. Ross, Edinburgh—equal; 19. James F. Lindsay, Lanarkshire; 20. C. K. Kruger, S. Africa; 21. C. W. Breeks, Westmoreland; E. H. Irwin, Armagh; and W. A. Williams, Bangor—equal; 24. Joseph Cæsar, Dumfriesshire; W. E. M'Kechnie, S. Africa; and J. F. Wolfe, Ireland—equal; 27. D. L. Fisher, Belfast; and G. S. Small, Brechin—equal; 29. G. F. Waterston, Forfar; 30. G. C. Low, Forfar; G. H. List, Haddington; and W. A. Young, Grennock—equal; 33. James Graham, Joppa; and T. Johnstone, Carlisle—

equal; 35. Edwin Matthew, Nairn; 36. Matthew Corry, Donegal; J. Boyd Jamieson, Edinburgh; and J. H. White, Tayport—equal; 39. Thomas B. Schoolbread, Portsmouth.

SECOND-CLASS HONOURS.—40. F. T. H. Adamson, Forfarshire; and H. Young Taylor, Edinburgh—equal; 42. G. L. Chiene, Edinburgh; Mark W. Manuk, and J. H. Paterson, Ceylon—equal; 45. W. H. Fowler, Edinburgh; and W. Morrison Milne, M.A., Morayshire—equal; 47. John Stevenson, New Zealand; 48. H. S. Ballantyne, Eskbank; 49. Wm. Anderson, New Zealand; and H. M. Bundey—equal; 51. J. A. Schoolbread, Corstorphine; 52. G. P. Thomas, Bath; 53. J. W. M'Intosh, Edinburgh; 54. B. N. Mullan, India; 55. E. Laval, Joppa; 56. J. G. Bailey, Worcester; 57. T. M. Coutinho, Bombay.

Absent from one Examination.—*First-Class Honours*—1. W. J. H. Hislop, New Zealand; N. Caine, Liverpool.

W. S. GREENFIELD, M.D., *Professor.*

OPERATIVE MIDWIFERY AND GYNECOLOGY.

FIRST-CLASS HONOURS.—R. W. Beesley, England (*Medallist*); W. A. Stephen, M.A., Scotland; J. Purves Stewart, M.A., Edinburgh; E. A. W. English, Bath; G. D. Gray, Edinburgh.

A. R. SIMPSON, M.D., *Professor.*

MEDICAL JURISPRUDENCE.

FIRST-CLASS HONOURS.—1. A. Corsar Sturrock, M.A.; 2. John Forbes; 3. D. J. Graham (*Medallists*); 4. G. J. Blackmore; 5. Thomas Gibson, Joseph Mason, and W. J. Penfold—equal.

SECOND-CLASS HONOURS.—8. J. G. P. Murray; 9. H. Cardale and H. G. Waugh—equal; 11. John M. Dawson; 12. George King, Duncan M. Mackay, and J. T. Shirlaw—equal; 15. W. G. C. Geekie; 16. John Gilmour and R. M. Leith—equal; 18. E. W. K. Scott, James Stenhouse, and J. C. Stuart, M.A.—equal; 21. William Evans; 22. A. M. Fleming; 23. C. J. Gorringe; 24. A. P. Low; 25. Richard Owen; 26. Thomas Dewar, George H. Masson, and James Watt—equal; 29. James Allison; 30. Henry Jones; 31. Arthur D. Peill; 32. John Bruce; 33. P. C. Lüttig, 34. J. Kirk.

DOUGLAS MACLAGAN, Kt., M.D., *Professor.*

MENTAL DISEASES.

FIRST-CLASS HONOURS.—1. J. R. Watson, M.A., B.Sc. (*Medallist*); 2. W. Begg, B.A.; W. R. Dawson, B.A., M.D.; and E. D. W. Greig—equal; 5. E. D. M'Rae and W. L. Martin—equal; 7. E. J. F. Birrell; 8. Jas. C. Rait.

SECOND-CLASS HONOURS.—9. Neil M'Vicar; 10. J. H. Lamb.

T. S. CLOUSTON, M.D., *Lecturer.*

DISEASES OF THE EYE.

First-Class Honours.—1. Joseph E. Bowes, Notts; 2. George S. Brock, Caithness (*Medallists*); 3. James Gillies, Isle of Skye; 4. James C. Rait, Scotland; 5. D. J. Jones, Wales; 6. H. S. Brockway, Madagascar; and John Forbes, Muir of Ord –equal; 8. Edwin Bramwell, England; 9. E. D. W. Greig, Edinburgh; 10. W. J. Penfold, Brampton.

Second-Class Honours.—11. W. Harry Hunter, Edinburgh; 12. James Affleck, Fort-William; 13. Wilfrid Glegg, Edinburgh; 14. Ronald T. Herdman, Edinburgh.

D. ARGYLL ROBERTSON, M.D., *Lecturer.*

WINTER SESSION, 1894-95.

CHEMISTRY.

Robert Wilson Memorial Prize.—Charles H. J. Watson.

First-Class Honours.—1. Charles H. J. Watson, S. Africa; 2. Herbert C. Keun, Singapore; 3. W. Blackadder, Broughty Ferry; 4. Y. A. Djedjizian, Asia Minor, and J. T. Young, Edinburgh—equal; 6. Thomas Livingstone, Stanhope, and David Stevens, Bridge of Earn—equal (*Medallists*); 8. George A. Davidson, Wigtownshire, and R. M. Rowe, Edinburgh—equal; 10. George Ednie, Edinburgh, and Frank P. Walker, Dudley—equal; 12. P. W. Hampton, Ramsey, and T. A. Sprague, Edinburgh—equal; 14. W. D. M. Falconer, Blairgowrie, and W. J. Haig—equal; 16. Alexander Brown, Edinburgh, and James A. Macdonald, Leith—equal; 18. Leopold O. Critchley, Inverness, Maxwell MacKelvie, Campbeltown, and John Pender, Lockerbie—equal; 21. D. Macrae Aitken, William Park, Kirkwall, and Robert B. Turnbull, Ross-shire equal; 24. Charles E. Fawsitt, Glasgow; 25. A. C. Heath, Surrey, R. D. Hudson, Madras, and H. A. D. Moore, Singapore—equal; 28. W. G. Mason, Lancashire; 29. James Y. Simpson, Edinburgh, and L. Maclagan Wedderburn, Forfar—equal; 31. Donald Banks; 32. John Ambrose, Blairgowrie; John Chalmers, Bathgate; Richard T. Currall, Leith; F. J. Jude, S. Australia; John G. Mitchell, Sutherland; Arthur Preston, Huddersfield; W. J. Stuart, M.A., Edinburgh; Robert G. Thomson, Edinburgh—equal.

Second-Class Honours.—40. B. K. Goldsmith, Douglas; P. S. Hardie, Edinburgh; and J. G. Jack, Edinburgh—equal; 43. J. M. Buist, Edinburgh; James Luckhoff, Cape Colony; and James Masson, Edinburgh—equal; 46. W. T. James, and H. M. Mackenzie, Edinburgh—equal; 48. W. J. D. Bromley, Lancaster;

George B. Robinson, and T. S. Shepherd, Settle—equal; 51. G. H. J. Brown, India; P. C. Campariole, Trinidad; and George G. Hay, Abernethy—equal; 54. E. Archer Brown, S. Africa; 55. George C. M'Leavy, Ireland, and John G. Munro, Thurso—equal; 57. George D. Laing, Northumberland; William Rogers, Wales; Alan B. Slater, Leeds; and K. L. Teng, Straits Settlements—equal; 61. John Leslie, Aberdeen, and George H. Menzies, Inverkeithing—equal; 63. R. R. Fasson, P. P. Gauteaume, Trinidad; and George Mackie, Montrose—equal; 66. M. Carthew, Langholm; A. Stanley Frank, Yorkshire; D. J. Hughes, Lleyn; and J. L. Louis, Mauritius—equal; 70. T. B. Gornall, Preston; C. S. Clark, Brighton; Alexander Darroch, Edinburgh; William C. Douglas, and F. Norton Menzies, N. Wales—equal; 75. A. S. M. Peebles, Edinburgh; 76. W. Keith Aikman, Edinburgh, and W. M. Mackay, Durham—equal; 78. A. D. Nimmo, Edinburgh, and A. Tweedie, Longniddry—equal; 80. Gilbert F. Cleaver, Trinidad; and J. A. R. Thompson—equal; 82. Ernest A. Boxer, John C. Carr, Carlisle; and William Paterson, Peebles—equal; 85. Harvey Baird, Perth, and Irvine K. Hermon, Montrose—equal; 87. A. D. S. Cooke, Calcutta; A. H. Firth, Gavin Miller, Stonehouse; J. Ramsay Munro, Lincolnshire; and Charles F. Noble, Inverness—equal; 92. F. Burne, England; A. M. Holmes, England; Raymundo F. Jardim, Demerara; F. Crichton Matthew, Mid-Lothian; William Reid, Montrose; and W. G. Thompson, Cavan—equal; 98. R. M. Dalziel, Dollar; J. Wishart Kerr, Culross; and A. J. Ramsay—equal; 101. W. Darling, Edinburgh; John Fullarton, Arran; James Husband, Edinburgh; William A. Murray, Cape Colony; and T. P. Oates, Cape Colony—equal.

PRACTICAL CHEMISTRY.

First-Class Honours.—1. C. H. J. Watson, South Africa, and J. T. Young, Edinburgh—equal; 3. W. Blackadder, Broughty Ferry; Alexander Brown, Edinburgh; and P. P. Gauteaume, Trinidad—equal (*Medallist.*); 6. John Pender, Lockerbie, and L. Maclagan Wedderburn, Forfar—equal; 8. P. W. Hampton, Ramsey, and T. Livingstone, Stanhope—equal; 10. A. P. L. Brown, Plymouth; E. Bernard Myers, New Zealand; W. J. Stuart, Edinburgh; and R. B. Turnbull, Ross—equal; 14. John Chalmers, Bathgate, and Gilbert E. Cleaver, Trinidad—equal; 16. Y. A. Djedjizian, Asia Minor, and John G. Munro, Thurso—equal; 18. Donald Banks, Wigtownshire; B. K. Goldsmith, Douglas; and Herbert C. Keun, Singapore—equal; 21. W. C. Douglas, Edinburgh, and Arthur Preston, Huddersfield—equal; 23. P. C. Campariole, Trinidad; J. L. Louis, Mauritius; James Masson, Edinburgh; and H. A. D. Moore, Singapore—equal;

27. James Luckhoff, Cape Colony; 28. John Ambrose, Blairgowrie; W. J. D. Bromley, Lancaster; J. M. Buist, Edinburgh; W. D. M. Falconer, Blairgowrie; Raymundo F. Jardim, Demerara; John Leslie, and Alan B. Slater, Leeds—equal; 35. R. N. Brebner, Canada; G. H. J. Brown, India; and J. C. M'Leavy, Ireland—equal; 38. George Gordon Cumming, Calcutta; George Ednie, Edinburgh; and R. R. Fasson—equal; 41. J. G. Jack, Edinburgh; F. J. Jude, Adelaide; and David Stevens, Bridge of Earn—equal; 44. W. M. Mackay, Durham, and T. S. Shepherd, Settle—equal; 46. W. K. Aikman, Edinburgh; John Anderson, Scotland; Richard T. Currall, Leith; A. C. Heath, Surrey, F. N. Menzies, North Wales; J. Gunn Mitchell, Sutherland; Robert C. Moir, Wick; and W. G. Thompson, Cavan—equal.

Second-Class Honours.—54. Maxwell MacKelvie, Campbeltown; 55. A. Stanley Frank, Yorkshire, and W. Rodgers, Wales—equal; 57. P. S. Hardie, Edinburgh; George G. Hay, Abernethy; and R. M. Rowe, Edinburgh—equal; 60. G. A. Davidson, Wigtonshire; 61. Ernest A Boxer, and George Mackie, Montrose—equal; 63. J. B. Cassels, Bombay; and William C. Reid—equal; 65. G. D. Laing, Northumberland; and V. E. Sorapure, Jamaica—equal; 67. M. Carthew, Langholm; R. D. Hudson, Madras; W. A. Murray, Cape Colony; and H. B. Sproat, Mull—equal; 71. T. B. Gornall, Thomas Graham, Cumberland; and W. T. James—equal; 74. James Husband, Edinburgh; J. Wishart Kerr, Culross; A. J. Ramsay, Edinburgh; and C. F. T. Scott, Belfast—equal; 78 Harvey Baird, Perth; D. J. Hughes, J. A. R. Thomson, and E. M. Young, Kinross—equal; 82. D. A. Callender, Edinburgh; T. P. Oates, Cape Colony; and H. D. Wilson, Victoria—equal; 85. A. M. Holmes, England; Gavin Millar, Stonehouse; W. Park, Orkney; and K. L. Teng, Straits Settlements—equal; 89. E. Archer Brown, S. Africa; Kirkland Chapel, Arbroath; and H. Oswald Smith, Edinburgh—equal; 92. J. A. Balck, Germany; Henry G. Carlisle, Liverpool; and H. M. Mackenzie, Edinburgh—equal; 95. A. D. S. Cooke, Calcutta; Alexander Darroch, Greenock; F. Dommisse, Cape Colony; T. de Faria, Portugal; M. King, Westmeath; Patrick A. Maclagan, Edinburgh; A. S. M. Peebles, Edinburgh; and A. K. Smith-Shand, Aberdeen—equal; 103. John Craig, Edinburgh; David B. King, and S. Neumark, Cape Colony—equal; 106. J. Ramsay Munro, Lincolnshire; 107. Leonard D. H. Baugh, Jamaica; John C. Carr, Carlisle; David Fenton, Forfar; and W. R. E. Williams, Edinburgh—equal; 111. A. H. Griffith, Bedford; A. W. Wakefield, Kendal; and R. Weatherston, Peebles—equal; 114. Irvine K. Hermon, Montrose; Louis W. Macpherson, Edinburgh; and Thomas S. A. Orr, Wigtownshire—equal; 117. Charles F. Noble, Inverness; and Elbert Steyn, Cape Colony—equal; 119. John Fullarton, Arran; George H. Menzies, Inver-

keithing; A. C. Neethling, Cape Colony; and William Paterson, Peebles—equal; 123. H. Faulkner and F. C. Matthew, Mid-Lothian—equal; 125. W. J. Collinson, C. Morgan, Ernest J. Peill, Madagascar; and Stephen Southall—equal.

ALEX. CRUM BROWN, M.D., *Professor.*

ELEMENTARY ZOOLOGY.

First-Class Honours.—1. George A. Davidson; 2. J. M. Macalister; 3. J. C. M'Conaghey and B. C. Myers—equal (*Medallists*); 5. G. Ross-Laing; 6. W. A. Murray; 7. Y. A. Djidjizian, D. J. Hughes, and H. M. Mackenzie—equal; 10. George Mackie, and T. S. Shepherd—equal; 12. D. A. Callender, J. J. Galbraith, and A. H. Wood—equal.

Second-Class Honours.—15. B. S. Hyslop; 16. John Cameron; 17. P. S. Hopkins; 18. A. K. Smith-Shand, E. J. Peill, P. Gauteaume, and H. G. Carlisle—equal; 22. W. M. Mackay; 23. M. A. Ghany, and G. H. Menzies—equal; 25. James Luckhoff, and Alfred Shearer—equal; 27. B. K. Goldsmith, C. A. B. Horsford, and T. C. Lauder—equal; 30. G. A. Mackay, and T. B. Gornall—equal; 32. R. R. Fasson, and C. S. Vartan—equal; 34. J. R. Munro, A. S. M. Peebles, and V. E. Sorapure—equal; 37. H. A. D. Moore, John Jamieson, G. C. M'Leavy, Maxwell MacKelvie, T. C. Mackenzie, and W. Reid, M.A.—equal; 43. R. N. Brebner, and F. Burne—equal; 45. R. N. Pringle, and W. Purves—equal; 47. H. C. Kenn, G. B. Robinson, R. B. Turnbull, and F. J. Jude—equal; 51. R. Rutherford, and R. G. Thomson—equal; 53. R. H. Hudson, and E. A. Loch—equal.

PRACTICAL ZOOLOGY.

First-Class Honours.—1. T. S. Shepherd; 2. R. N. Brebner and A. H. Wood—equal (*Medallists*); 4. E. A. Brown; 5. Y. A. Djidjizian, T. C. Lauder, and W. R. E. Williams—equal; 8. F. Jude; 9. W. M. Mackay; 10. A. K. S. Shand.

Second-Class Honours.—11. Bernard Myres; 12. Geo. Mackie; 13. P. P. G. Gauteaume and W. G. Thompson—equal; 15. P. W. Hampton, D. J. Hughes, and W. J. Jones—equal; 18. R. B. Turnbull; 19. T. B. Gornall; 20. Ch. Forsyth and B. R. Goldsmith—equal; 22. G. Haddow and W. Purves—equal; 24. R. G. Thompson; 25. G. Cumming and W. A. Murray—equal; 27. John Craig and V. E. Sorapure—equal; 29. J. W. Kerr; 30. L. Lessing; 31. W. T. D. Bromley and T. C. Mackenzie—equal; 33. J. B. Cassels, H. M. Mackenzie, and J. Luckhoff—equal; 36. A. Nesthling; 37. R. N. Pringle and J. E. Ratcliffe—equal; 39. F. N. Menzies.

J. C. EWART, M.D., *Professor.*

PHYSICS.

First-Class Honours.—1. C. H. Watson, South Africa; 2. J. G. Jack, Edinburgh (*Medallists*); 3. J. Pender, Lockerbie, Dumfriesshire; 4. D. M. M'Calister, Edinburgh; 5. T. Livingstone and J. G. Munro, Thurso—equal; 7. A. Preston.

Second-Class Honours.—8. J. A. Smail, Edinburgh; 9. F. N. Menzies; 10. G. H. J. Brown, India; 11. J. C. Carr and A. S. Frank—equal; 13. E. A. Boxer, Ladywell, S.E., and C. F. Noble—equal; 15. P. J. Bodington and J. R. Munro, Norwich—equal; 17. F. Burne, Cumberland; 18. W. Paterson, Peebles; 19. T. Graham and A. C. Heath, Egham, Surrey—equal; 21. E. G. Ffrench, Kingston, Jamaica, and H. B. Sproat—equal; 23. T. R. Robertson, Edinburgh; 24. G. J. R. Carruthers, M. Carthew, C. E. Smith, New Zealand; and L. M. Wedderburn, Forfar—equal.

C. G. KNOTT, D.Sc., *Lecturer.*

ANATOMY.

Students of the Third Year.

practical anatomy.

First-Class Honours.—1. William Hamilton, Middlesborough; William F. Harvey, M.A., Edinburgh; C. H. Kruger, South Africa; and Edwin Matthew, M.A., Nairn—equal (*Medallists*); 5. B. C. R. Aldren, Malvern; C. M. Cooper, Somersetshire; J. S. Fraser, Cupar-Fife; G. C. Low, Forfarshire; and H. M. Traquair, Edinburgh—equal; 10. Thomas Biggam, Scotland; Geo. Gatenby, Stockton-on-Tees; C. H. Johnson, Melbourne; W. R. Somerset, Derbyshire; and J. W. Struthers, Edinburgh—equal; 15. T. R. W. Armour, Edinburgh; Henry F. Roland, Dundee; James Graham, Kirkintilloch; C. D. Lander, India; John Malcolm, Caithness; C. H. Phillips, Barbados; and J. D. Slight, Portobello—equal; 22. H. S. Ballantyne, B.Sc., Eskbank; G. L. Findlay, Natal; James Forrest, Lancashire; R. K. Howden, Natal; Patrick Kinmont, Scotland; Robert Selby, Wigtownshire; and W. O. Williams, Wales—equal; 29. T. M. Callender, Leith; R. C. Cunningham, Londonderry; William Findlay, France; R. W. Knox, India; and F. M. Willcox, Australia—equal; 34. V. G. Alexander, Scotland; G. L. Chiene, Edinburgh; E. Jones, Wales; A. J. M'Clymont, Kirkcudbrightshire; E. F. M. Neave, Dundee; R. C. Riddell, East Lothian; and J. F. Wolf, Cork—equal; 41 J. E. H. Bennett, Clonakilty; C. A. Brugman, South Africa; Norman Gunn, Dollar; Ian L. MacInnes, India; F. M. Parry, India; G. S. Small, Brechin; G. F. Waterston, Forfarshire; and A. R. Wight, Castle Wellan—equal; 49. F. T. H. Adamson,

Forfarshire; A. E. Brookes, Llandudno; A. Fawnes Cameron, Forfarshire; W. S. Eaton, Cumberland; J. F. Falconer, Morayshire; William Gorrie, Perth; G. W. Miller, Dundee; A. MacCarthy, Dorsetshire; and Jas. Prentice, M.A., Fifeshire—equal; 58. A. J. T. Allan, Portland; J. S. Lyle, Ireland; A. J. Orchard, New Zealand; J. H. P. Paton, Duddingstone; and A. H. Pirie, Dundee—equal; 64. David Clow, Kelso; L. W. Davies, Wales; W. H. Fowler; E. H. Irwin, Ireland; J. Boyd Jamieson, Edinburgh; and W. G. Wight, Castle Wellan—equal; 69. William Burns, Forfarshire; T. N. Johnston, Edinburgh; T. F. Johnston, Ormiston; and F. W. More, Caithness—equal; 73. C. W. Breeks, Westmoreland; C. J. Caddick, West Bromwich; J. G. Forbes, Edinburgh; A. M. Little, Annan; and W. W. Maxwell, Newcastle-on-Tyne—equal; 78. H. Y. Taylor, Edinburgh; and W. J. Veecock, British Guiana—equal; 80. Thomas Johnstone, Cumberland; and A. J. Ryle, North Wales—equal; 82. R. M. Gibson, Paisley; and Henry Taylor, Bristol—equal; 84. W. M. A. Smith; 85. Leonard Boyer, Lincolnshire; James Donaldson, Lanarkshire; Noël M'Gowan, Dumfries; and T. B. Shoolbread, Portsmouth—equal; 89. G. W. Payne, Barbados; 90. C. Redwood White, Jamaica; 91. Stewart Faed, Edinburgh; and T. H. O'Reilly, Ireland—equal.

Second-Class Honours.—93. F. S. Harper, Hawkhurst; 94. J. A. Shoolbread, Portsmouth; and G. J. Young, Scotland—equal; 96. C. H. Elmes.

The following gentlemen, who would otherwise have obtained Honours, were unavoidably absent from one of the five examinations:—

G. B. Hollings, London; G. B. Serle, East Linton; J. W. Macintosh, Scotland; Herbert Malins, England; A. H. Keun, Singapore.

Students of the Second Year.

Lectures on Anatomy.

First-Class Honours.—John Richards, Wales (*Medallist*).

Second-Class Honours.—A. H. Wood, Fifeshire.

Practical Anatomy.—Oral examinations conducted on the student's own dissections.

First-Class Honours.—1. J. M. Reid, Edinburgh; A. C. Sandstein, New Zealand; and R. F. M'Nair Scott, B.A., Singapore—equal (*Medallists*); 4. J. D. Comrie, M.A., Aberdeenshire; and George Lyon, Ardlamont—equal; 6. G. E. J. King, Cheltenham; 7. J. M. Gray, Perthshire; 8. J. H. Gordon, Mid-Lothian; 9. J. A. Raeburn, Dollar; 10. Geo. Dick, Wick; 11. J. Spencer Low, Yorkshire; 12. J. M. Cuthbert, Edinburgh.

Second-Class Honours.—1. C. A. B. Horsford, West Indies; 2. James Monroe, Edinburgh.

STUDENTS OF THE FIRST YEAR.

LECTURES ON ANATOMY.

FIRST-CLASS HONOURS.—1. W. Moncrieff Paul, Dollar; 2. G. G. Hay, Abernethy; 3. J. D. Comrie, M.A., Aberdeenshire; and W. J. Stuart, M.A., Edinburgh—equal (*Medallists*); 5. Charles H. J. Watson, South Africa; 6. Y. A. Djedjizian, Turkey; 7. T. R. Matthews, Jamaica; and Wm. Park, Orkney—equal; 9. Thomas Livingstone, Stanhope; 10. Arthur Preston, Yorkshire; 11. D. J. Hughes, Lleyn; and James Luckhoff, Cape Colony—equal; 13. John Cameron, Laurencekirk; 14. R. M. Rowe, Edinburgh; 15. J. A. C. Smith, Deeping, St Nicholas; and L. M. Wedderburn, Forfarshire—equal; 17. L. D. H. Baugh, Jamaica; James Masson, M.A., Edinburgh; W. P. Meldrum, Mauritius; J. G. Mitchell, Sutherlandshire; and P. L. M'All, B.A., Leeds—equal; 22. J. G. Monro, Caithness; and John Pender, Scotland—equal; 24. John Anderson, Dollar; P. C. Campariole, Trinidad; A. G. Hamilton, Chester; Maxwell MacKelvie, Campbeltown; and D. A. MacVean, Ardgour—equal.

SECOND-CLASS HONOURS.—1. R. M'K. Skinner, Hastings; 2. Harvey Baird, Perth; and J. J. Galbraith, Inverness—equal; 4. W. A. Murray, B.A., Cape Colony; W. M. Mackay, Crook; and H. M. Mackenzie, Helensburgh—equal; 7. Harold Macfarlane, Scotland; and G. H. W. Robertson, Edinburgh—equal; 9. A. C. Heath, Surrey; and D. B. King, M.A., Pittenweem—equal; 11. H. G. Carlisle, Liverpool; and J. C. Carr, Carlisle—equal; 13. Robert Gibson, Port William; and R. B. Turnbull, Ross-shire—equal; 15. Wm. Reid, M.A., Montrose; and R. C. Verley, Jamaica—equal; 17. E. Archer Brown, Cape Colony; and Geo. Mackie, Scotland—equal; 19. Wm. Darling, Edinburgh; Geo. Haddow, Coatbridge; T. P. Oates, Cape Colony; and Robert Ritchie, Edinburgh—equal; 23. F. C. Matthew, Corstorphine; 24. G. H. Menzies, Inverkeithing; T. C. Mackenzie, Swatow, China; and J. Shalaby, Egypt—equal; 27. T. B. Gornall, Preston; Wm. Jas. Jones, Wales; J. Wishart Kerr, Culross; H. C. Keun, Singapore; C. G. O. Nixon; F. E. Robinson, Ireland; and A. K. Smith-Shand, Aberdeen—equal; 34. J. B. Cassels, Bombay; and J. Ramsay Munro, Norwich—equal; 36. L. P. Brassey, Chester; P. P. G. Gauteaume, Trinidad; A. C. Murray, Birnam; C. F. Noble, Inverness; and J. Rees Roberts, Denbigh—equal; 41. D. A. Callender, Edinburgh; C. W. Melville, Scotland; and C. S. Steavenson, Darlington—equal; 44. G. G. Cumming, India; and L. W. Macpherson, Melrose—equal; 46. J. K. Hermon, Montrose; A. M. Holmes, England; J. G. Jack, Edinburgh; and R. G. Thomson, Buckhaven—equal; 50. A. E. Burroughs, Southport; and Leonard Crossley, Lancashire—equal; 52. G. D. Laing, Burton; A. S. M. Peebles, Scotland; and A.

E. B. Wood, Devonshire—equal; 55. Ernest A. Boxer, Edinburgh; Frank Burne, Penrith; R. D. Hudson, India; F. de L. Myers, Jamaica; James Orr, Hawick; Peterswald Pattison, Edinburgh; and G. B. Pemberton, Dublin—equal; 62. W. J. D. Bromley, Lancashire; W. J. Collinson, Guernsey; Drummond Fergusson, Richmond; A. S. Frank, Yorkshire; G. G. Ghose, India; S. Southall, Birmingham; and E. M. Young, Scotland—equal.

PRACTICAL ANATOMY.

Oral Examinations conducted on the Student's own dissections.

First-Class Honours.—1. J. A. Smaill, Edinburgh; and A. K. Trail, Jeypoor—equal; 3. D. B. King, M.A., Pittenweem; and W. J. Stuart, M.A., Edinburgh (*Medallists*); 5. T. R. Matthews, Jamaica; 6. Graeme Hamilton, Ashton; 7. W. P. Meldrum, Mauritius; 8. Charles Forsyth, Berwick; 9. L. D. H. Baugh, Jamaica; Alfred Shearer, Orkney; and A. B. Shed, Berwick—equal; 12. W. N. Barker, Cupar-Fife, and P. H. Henderson, Coupar-Angus—equal; 14. Ivie Aird, Dumfriesshire; 15. H. T. Holland, Durham; 16. A. B. George, Montrose; A. G. Hamilton, Chester; James Leggate, Burton; and Robert Ritchie, Edinburgh—equal; 20. James Masson, Edinburgh; 21. D. A. MacVean, Ardgour.

Second-Class Honours.—1. G. H. W. Robertson, Edinburgh; 2, E. C. Maddock, Yorkshire; 3. Hugh Faulkner, Pau, France; 4. A. de St L. F. Perigal, New Barnet.

The Two Mackenzie Bursaries were awarded to F. A. Barnardo, M.A., India; and F. J. Gray, Edinburgh—equal; J. T. P. Heatley, Northumberland, and Henry Wade, Falkirk—equal.

Special Certificates of proficiency in Practical Work were awarded to G. H. Boyden, Birmingham; Graeme Hamilton, Ashton; D. B. King, M.A., Pittenweem; and James Leggate, Burton.

The Junior John Aitken Carlyle Bursary in Anatomy and Chemistry was awarded to Y. A. Djedjizian, Turkey.

Proxime Acces.—Thomas Livingstone, Stanhope.

The following gentlemen acted as Prosectors to the Class:—G. B. Hollings, London; C. H. Johnson, Melbourne; Miles Johnston, Uruguay; J. A. Murray, Edinburgh; R. F. M'Nair Scott, B.A., Singapore.

WILLIAM TURNER, Knt., M.B., *Professor.*

PHYSIOLOGY.

SENIOR DIVISION.

First-Class Honours.—1. W. F. Harvey, M.A., India; 2. J. D. Slight, Portobello (*Medallists*); 3. G. Gatenby, Stockton-on-Tees; 4. E. Matthew, M.A., Nairn, and J. Muir, Castle-Douglas

—equal; 6. H. M. Traquair, Edinburgh; 7. J. F. Falconer, Elgin; 8. T. A. Ross, Edinburgh; 9. W. Hamilton, Middlesborough, and W. W. Wood, Leith—equal; 11. W. E. M'Kechnie, South Africa.

SECOND-CLASS HONOURS.—12. T. R. W. Armour, Edinburgh; and R. K. Howden, Natal—equal; 14. T. Biggam, Wigtownshire; W. Finlay, France; J. Malcolm, Caithness, and J. Prentice, Fifeshire—equal; 18. B. C. R. Aldron, Malvern; E. P. Bauman, Cape Colony; A. H. Pirie, Dundee; and C. Porter, Edinburgh—equal; 22. H. S. Ballantyne, Ashton; G. W. Miller, Dundee; and F. M. Wilcox, Australia—equal; 25. J. R. Atkinson, Crewe; and R. C. Cuningham, Londonderry—equal; 27. J. S. Fraser, Cupar-Fife; and J. Graham, Kirkintilloch—equal; 29. W. J. H. Hislop, New Zealand; C. M. Robertson, Mexico; and A. R. Wight, Castlewellan—equal; 32. W. Burns, Forfarshire; 33. J. E. H. Bennett, County Cork; and P. Kinmont, Scotland—equal; 35. T. M. Callender, Leith; J. H. White, Scotland; and W. G. Wight, Castlewellan—equal; 38. A. J. Huges, Wales; and W. Martin, Ireland—equal; 40. H. F. Boland, Scotland; O. Raitt, Nairn; G. C. Thomas, Bath; A. H. Watt, Edinburgh; and A. G. Worrall, Dundee—equal; 45. F. T. H. Adamson, Forfarshire; J. B. Jamieson, Edinburgh; G. C. Low, Forfarshire; and R. G. Riddell, East Lothian—equal; 49. F. O. Lasbrey, Edinburgh, and G. H. List, Haddington—equal; 51. V. G. Alexander, Scotland; R. Hill, London; and E. Laval, Edinburgh—equal; 54. B. Black, Edinburgh; G. L. Chiene, Edinburgh; T. F. Johnston, Ormiston; and C. H. Phillips, West Indies—equal; 58. C. P. B. Wall, London; 59. D. Clow, Kelso; W. S. Eaton, Cumberland; J. D. M'Crindle, Scotland; and F. M. Parry, India—equal; 63. N. M'Gowan, Dumfries; 64. J. R. Williamson, England; T. J. F. M'Hattie, Antigua, W.I.; and H. T. J. Thacker, New Zealand—equal.

JUNIOR DIVISION.

FIRST-CLASS HONOURS.—1. G. Lyon, Ardlamont, and D. B. Watters, Wick—equal; 3. R. F. M'Nair Scott, B.A., Singapore; 4. A. C. M'Gilchrist, Scotland (*Medallists*); 5. R. J. Dick, Dunbar; 6. L. Kingsford, New Zealand; 7. C. King, British Guiana; 8. J. H. Rhodes, Kendal, and A. C. Sandstein, New Zealand—equal; 10. A. T. Gailleton, Perth; and G. Dick, Wick—equal.

SECOND-CLASS HONOURS.—12. W. C. Wilson, Calcutta, and J. H. Gordon, Mid-Lothian—equal; 14. G. E. J. King, Cheltenham, and R. W. M'Kenna, Dumfries—equal; 16. S. Branch, West Indies, and E. M'Culloch, Edinburgh—equal; 18. D. V. M'Intyre, Dundee, and E. W. Lewis, Bellory—equal; 20. A. L. Anderson, New Zealand, and R. Cumming, Montrose—equal; 22. J. Cameron, Laurencekirk, and H. Macfarlane, Kilmarnock—

equal; 24. E. Somerville, Staffordshire; 25. W. N. Barker, Cupar-Fife, and C. W. Breeks, India—equal; 27. R. Crawford, Bradford; J. M. Cuthbert, Scotland; and G. de Labat, Cape Colony—equal; 30. W. Bell, Barrow-in-Furness, and G. E. Twigge-Molecey, Warwickshire—equal; 32. J. W. M'Kenzie, Inverness; J. A. Raeburn, Dollar; J. M. Campbell, Montrose; and R. M. Dalziel, Scotland—equal; 36. J. M. Bowie, Edinburgh, and P. L. M'All, Leeds—equal; 38. C. S. Brebner, Darlington; A. D. Fordyce, Edinburgh; A. Gilmour, Edinburgh; A. Goodall, Ayrshire; C. A. B. Horsford, West Indies; and P. G. L. du Toit, South Africa—equal; 44. D. V. M. Adams, Lanark, and R. Gibson, Fort-William—equal; 46. James Burnet, Edinburgh; J. R. Roberts, North Wales; and H. Wade, Falkirk—equal; 50. W. H. Dickinson, Newcastle; C. Forsyth, Glasgow; B. S. Hyslop, Leven; J. S. Low, Yorkshire; T. R. Matthews, Jamaica; H. M'Calman, Lochfyne; J. M'Gregor, Crieff; D. A. M'Vean, Scotland; R. Ritchie, Edinburgh; J. A. C. Smith, Deeping, St Nicholas; A. H. Thompson, Barrow-in-Furness; W. E. J. Wallis, Aldershot; and A. G. Hamilton, Chester—equal.

PRACTICAL PHYSIOLOGY.

First-Class Honours.—1. A. T. Gailleton, Perth—*Medallist*; 2. A. C. M'Gilchrist, Scotland; 3. D. B. Waters, Wick.

Second-Class Honours.—4. C. D. Lander, India; 5. S. J. Grinsell, Sydney.

WILLIAM RUTHERFORD, M.D., *Professor.*

MATERIA MEDICA.

First-Class Honours.—1. Charles M. Cooper, England; and Wm. F. Harvey, M.A., South India—equal; 3. John Richards, North Wales, and T. A. Ross, Edinburgh—equal; 5. Wm. Hamilton, Middlesborough (*Medallists*); 6. Thomas Biggam, Wigtownshire; 7. Theodore R. W. Armour, Edinburgh, and William Burns, Forfarshire—equal; 9. Richard W. Anthony, India: George C. Low, M.A., Scotland, and Edwin Matthew, M.A., Nairn.

George Gatenby obtained 75 per cent. in two class examinations, but was absent through illness from the third.

Second-Class Honours.—12. Robert C. Cunningham, Londonderry; James F. Falconer, Morayshire; and Harry M. Traquair, Edinburgh—equal; 15. Archibald F. Cameron, Forfarshire, and Patrick Kinmont, Scotland—equal; 17. Walter J. H. Hislop, New Zealand, and John Malcolm, Dunnet—equal; 19. Cyril H. Phillips, Barbados; George S. Small, Brechin; and Andrew H. Watt, Edinburgh—equal; 22. George B. Serle, East Linton; 23. Harold S. Ballantyne, Eskbank; 24. Henry T. J. Thacker, New

Zealand; 25. John S. Fraser, Cupar; 26. A. Newton Davies, England; 27. Victor G. Alexander, Scotland; John E. H. Bennett, Clonakelty; David Clow, Kelso; and Noel M'Gowan, Dumfries—equal; 31. Charles D. Lander, India, and James E. Wolfe, Ireland—equal; 33. Bertram C. R. Aldren, Malvern; Jas. Forrest, England; Thomas F. Johnston, Ormiston; Arthur J. Ryle, Wales; James D. Slight, Portobello; and Walter G. Wight, Castlewellan—equal; 39. Robert N. Brebner, Canada, and John Boyd Jamieson, Edinburgh—equal; 41. Robert G. Riddell, East Lothian; 42. Henry F. Boland, Scotland; Thomas M. Callender, Scotland; and William Wilson Wood, Scotland—equal; 45. Thomas Johnstone, Carlisle; F. W. More, Caithness; Ian L. M'Innes, India; William M. A. Smith, Forfarshire; and Adam R. Wight, Castlewellan—equal; 50. John G. Bailey, Worcester; Rowland Hill, London; Robert K. Howden, Natal; and Alexander B. MacCarthy, Ireland—equal; 54. Alfred E. Brookes, Llandudno; William Martin, County Down; Ernest E. Porritt, New Zealand; and William M. Wilson, Northumberland—equal; 58. Leonard Boyer, Lincolnshire; John W. Struthers, Edinburgh; and Henry Y. Taylor, Edinburgh—equal; 61. Charles H. Kruger, South Africa; Charles M. Robertson, Mexico; and John Rutter Williamson, Surrey—equal; 64. James Donaldson, Carnwath; William H. Fowler, Edinburgh; Albert J. Orchard, New Zealand; and Thomas B. Shoolbread, Portsmouth—equal; 68. Arthur L. Anderson, New Zealand; Louis F. B. Biccard, Cape Colony; G. Landsborough Findlay, Natal; James D. F. Milln, Scotland; Donald Macdonald, Argyll; Nigel Oliphant, Scotland; and Alfred A. Robinson, Trinidad—equal.

James Haworth, Lancashire; and Guy B. Hollings, London, obtained 53 per cent. in two of the class examinations, but were unavoidably absent from the third.

PRACTICAL MATERIA MEDICA.

First-Class Honours.—1. James D. S. Milln, Scotland; 2. John Rees Roberts, Wales.

Second-Class Honours.—3. Nigel Oliphant, Scotland.

THOMAS R. FRASER, M.D., *Professor.*

GENERAL PATHOLOGY.

First-Class Honours.—1. William F. Harvey, M.A., India; and John Richards, N. Wales—equal (*Medallists*); 3. W. H. Goldie, New Zealand; 4. George C. Low, Forfarshire.

Second-Class Honours.—5. C. M. Cooper, Somersetshire; 6. C. D. Lander, India; and H. M. Traquair, Edinburgh—equal; 8. Edwin Matthew, M.A., Nairn; 9. C. H. Johnson, Melbourne; 10. H. S. Ballantyne, Scotland; 11. W. J. H. Hislop, New

Zealand; 12. John Stevenson, New Zealand, and Henry Y. Taylor, Edinburgh—equal; 14. R. K. Howden, Natal; and W. G. Wight, Castlewellan—equal; 16. W. H. Fowler, Edinburgh; and J. Prentice, Fife—equal; 18. George S. Small, Brechin; and W. Wilson Wood, Leith—equal; 20. A. J. Orchard, New Zealand; 21. J. G. Bailey, Worcester; J. Boyd Jamieson, Edinburgh; and J. H. White, Scotland—equal.

Present at only Two Examinations.—SECOND-CLASS HONOURS—Thomas F. Johnston, Ormiston; J. B. Serle, East Linton; and Maurice B. Wright, Derbyshire.

PRACTICAL PATHOLOGY.

FIRST-CLASS HONOURS.—1. J. R. Hall Walker, Edinburgh.

SECOND-CLASS HONOURS.—2. J. T. Scott, Selkirk; 3. S. Faed, Edinburgh.

W. S. GREENFIELD, M.D., *Professor.*

SYSTEMATIC SURGERY.

SENIORS.

FIRST-CLASS HONOURS.—1. James Gray, Dundee; 2. J. C. Stuart, Yorkshire—(*Medallists*); 3. James Wood, Burntisland; 4. James F. Lindsay, Lanarkshire, and Andrew Wallace, Prestonpans—equal; 6. John G. P. Murray, Gosport; 7. Percy T. Herring, New Zealand; Joseph Mason, Yorkshire; and James R. Watson, M.A., B.Sc., Falkirk—equal; 10. John Forbes, Ross-shire; 11. Robert Cross, England; 12. John M. Dalziel, India.

SECOND-CLASS HONOURS.—13. John Macmillan, Edinburgh; W. A. W. Moore, Belfast; and J. K. Raymond, England—equal; 16. A. M. Love, Ireland; 17. John Gilchrist, Argyleshire; 18. J. M. de Vos, Cape Colony; 19. James S. Martin, Waterford; G. Wishart M'Intosh, Kirkcaldy; and F. M. Purchas, New Zealand—equal; 22. Alexander J. Kennedy, Inverness; 23. G. J. Blackmore, New Zealand; and A. N. Davies, Warwick—equal; 25. Noel D. Bardswell, Kingston-on-Thames; Stanley Ducat, Arbroath; Robert Gardner, Edinburgh, and E. Lloyd Owen, Wales—equal; 29. J. A. Terras Bell, New Zealand, and W. T. Ritchie, Edinburgh—equal; 31. Henry Halton, Carlisle; 32. E. Arkwright, Leicestershire; 33. Arthur J. A. Theobalds, England.

The following gentlemen, through illness, were only able to attend two examinations, but gained marks for a first-class certificate:—W. Harry Hunter, Edinburgh; Stewart G. Ogilvy, Edinburgh; G. Roberts, Wales; and Robert Irvine, Londonderry. John Robert Lord, England, obtained marks for a second-class certificate.

JUNIORS.

First-Class Honours.—1. John H. Gordon, Mid-Lothian; 2. Robert F. M'Nair Scott, B.A., Singapore; 3. George Lyon, Argyleshire; 4. William Bell, England (*Medallists*); 5. Alfred Charles Sandstein, New Zealand; 6. P. R. Matthews, Jamaica, and G. E. Twigge-Molecey, Bombay—equal; 8. George Dick, Wick, and Ernest W. Lewis, India—equal; 10. J. M. Bowie, Edinburgh, and Arthur W. Limont, Alnwick—equal; 12. Robert J. Dick, Dunbar; 13. Priyanath Deb, India; Percy L. M'All, Leeds; James Martin Reid, Edinburgh; and Henry Wade, Falkirk—equal; 17. Ivie Aird, Lockerbie; C. A. B. Horsford, West Indies; and J. A. C. Smith, Deeping, St Nicholas—equal; 20. A. C. M'Gilchrist, Islay; J. H. Rhodes, Kendal; and David Wardrop, Cumnock—equal; 23. Charles Stuart Brebner, Darlington; Clarence King, British Guiana; and Edgar Somerville, Staffordshire—equal; 26. Daniel Vere M. Adams, Lanark, and William Carlisle Wilson, Crieff—equal.

Second-Class Honours.—28. Robert Crawford, Bradford; James M. Cuthbert, Edinburgh; Robert Gibson, Fort William; J. Spencer Low, Yorkshire; and D. B. Waters, Caithness—equal; 33. George E. J. King, Cheltenham, and G. N. W. Thomas, England—equal; 35. William N. Barker, Cupar-Fife, and Alfred Shearer, Orkney—equal; 37. William Lockerbie, Edinburgh, and Robert W. Mackenna, Dumfries—equal; 39. Alex. K. Traill, India, and R. C. Verley, Jamaica—equal; 41. J. B. Blaikie, Roxburghshire; Andrew Gilmour, Edinburgh; P. H. Macdonald, Leith; John W. Mackenzie, Inverness; W. J. M. M'Farlan, Dumfries; Ward Smith, Staffordshire; and W. E. J. Wallis, England — equal; 48. C. E. Hutson, Barbadoes; 49. Robert Bruce, Edinburgh; Miles Johnston, Uruguay; Gerrit de Labat, Cape Colony; and D. W. Maclagan, Edinburgh—equal; 53. Wm. Stanforth Eaton, Cumberland, and Richard Owen, Wales—equal; 55. R. M. Dalziel, Nagpore; James A. Raeburn, Dollar; and W. E. Tellet, Bridge of Allan—equal; 58. Lawrence H. B. Mills, Norfolk; 59. James Burnet, Edinburgh; Albert A. Gunn, Strathpeffer; and William Tarr, Somerset—equal; 62. Alex. George Hamilton, Chester, and E. C. G. Maddock, Toronto—equal; 64. Edward M'Culloch, Edinburgh; 65. Stanley Branch, West Indies; 66. William Craig, Kelso; William John Nutter, Oswaldtwistle; and Arch. Bisset Shed, Fouldon, Berwick—equal; 69. Alexander Beith George, Montrose; Græme Hamilton, Ashton; and A. E. B. Wood, Devon—equal; 72. John Alcindor, Trinidad; R. J. Asbury, England; Hugh M'Calman, Tarbert; and W. Mackenzie Wilson, Northumberland—equal; 76. James M. Gray, Perthshire, and F. G. Ralston, Glasgow—equal; 78. A. C. Brown, Cheshire; Thomas E. Hincks,

South Wales; Anthony S. Parker, Cheltenham; and George A. Rorie, Dundee—equal; 82. F. H. Stirling, St Andrews; 83. Angus R. Buchanan, Thirsk, and Alexander Hunter, Ayr—equal; 85. F. J. H. Bateman, Norwich; 86. Cyril H. Durrant, West Indies; D. D. Farquharson, Islay; and Arthur H. Thomas, Cornwall—equal; 89. Robert Cameron, Scotland; and George W. Smith, West Indies—equal.

Honours are given in both divisions of the Class of Systematic Surgery on the combined results of the written and practical examinations.

The following gentlemen were unavoidably absent from one examination, and obtained marks for

First-Class Honours.—Duncan Forbes, Perth; R. W. T. Ewart, Dumfries.

Second-Class Honours.—T. D. M'Laren, Edinburgh; R. King, Edinburgh; G. F. B. Simpson, Edinburgh; C. M. Pearson, Edinburgh; Wm. Roy Macdonald, Edinburgh; J. M. Campbell, Montrose; H. T. Holland, Durham; W. P. Meldrum, Mauritius; J. Monroe, Scotland; R. A. Macneil, Scotland.

PRACTICAL SURGERY.

SENIORS.

W. Harry Hunter, Edinburgh—*Medallist.*

Honours.—James Gray, Dundee, and W. A. W. Moore, Belfast—equal; John Macmillan, Edinburgh, and Joseph Mason, Yorkshire—equal; James F. Lindsay, Lanarkshire; James S. Martin, Waterford; F. M. Purchas, New Zealand; Andrew Wallace, Prestonpans; and James Wood, Burntisland—equal; Robert Irvine, Londonderry; G. Roberts, Wales; and J. C. Stuart, Yorkshire—equal; Stewart G. Ogilvy, Edinburgh; John R. Lord, England; A. M. Love, Ireland; Percy T. Herring, New Zealand; and J. W. de Vos, Cape Colony—equal; Robert Cross, England; Stanley Ducat, Arbroath; and James R. Watson, Falkirk—equal.

HAROLD J. STILES, M.B., *Demonstrator.*

JUNIORS.

David Wardrop, Cumnock (*Medallist*); J. H. Gordon, Mid-Lothian, and R. F. M'Nair Scott, B.A., Singapore—*Proxime Acces.*

Honours.—George Dick, Wick; Robert Gibson, Fort-William; Percy L. M'All, Leeds; and A. K. Traill, India—equal; D. V. M. Adams, Lanark; J. Aird, Lockerbie; R. Bruce, Edinburgh; J. M. Cuthbert, Edinburgh; P. Deb, India; Duncan Forbes, Perth; Alf. T. Gailleton, Perth; C. A. B. Horsford, West Indies; C. E. Hutson, Barbadoes; Gerrit de Labat, Cape Colony; J. S.

Low, Yorkshire; P. H. Macdonald, Leith; J. W. M'Kenzie, Inverness; F. G. Ralston, Glasgow; J. A. C. Smith, Deeping; and Edgar Somerville, Staffordshire—equal; William Bell, England; W. S. Eaton, Cumberland; R. W. T. Ewart, Dumfries; E. W. Lewis, India; R. W. Mackenna, Dumfries; D. W. Maclagan, Edinburgh; T. R. Matthews, Jamaica; Edward M'Culloch, Edinburgh; W. J. M'Farlan, Dumfries; Laurence H. B. Mills, Norfolk; J. M. Reid, Edinburgh; J. H. Rhodes, Kendal; Ward Smith, Staffordshire; Arthur H. Thomas, Cornwall; R. C. Verley, Jamaica; Henry Wade, Falkirk; W. E. J. Wallis, England; and D. B. Waters, Caithness—equal.

E. G. FORTUNE, M.B., *Demonstrator.*
JOHN CHIENE, *Professor.*

MIDWIFERY.

First-Class Honours.—1. W. W. Chipman, Canada; 2. James Stenhouse, Scotland; 3. D. J. Graham, Scotland; 4. J. C. Stuart, M.A., Scotland; 5. C. MacLaurin, Australia (*Medallists*); 6. T. H. Macfie, Scotland; 7. James Watt, New Zealand; 8. G. J. Blackmore, New Zealand; 9. J. Forbes, M.A., Inverness, Scotland; 10. James Gray, Scotland; 11. J. H. Henderson, New Zealand; 12. G. W. M'Intosh, Scotland; 13. J. G. P. Murray, England; 14. D. Waterston, Scotland; 15. James Bannermann, England; 16. John Eason, Scotland, and E. D. W. Greig, Scotland—equal; 17. J. L. Marjoribanks, Scotland; 18. F. Gardiner, Scotland; 19. Walter F. Eason, Scotland; 20. J. Forbes, Ross-shire, Scotland; 21. M. Hughes, Wales; 22. H. E. Huntly, England; 23. A. P. Low, Scotland; 24. W. J. Penfold, England; 25. G. L. Proctor, England; 26. G. Lloyd Roberts, Wales.

Second-Class Honours.—27. J. Mandall Coats, Scotland; 28. S. J. Gilfillan, Scotland; 29. A. Lewis Husband, England; 30. J. Kirk, Scotland; 31. Angus Macdonald, M.A., Scotland; 32. W. L. Martin, Scotland; 33. James Allison, Scotland; 34. George Henderson, Scotland; 35. Robert M. Leith, South Africa; 36. P. C. Luttig, South Africa; 37. E. W. K. Scott, Australia; 38. A. Wallace, Scotland; 39. D. Brough, Scotland; 40. E. Lloyd Owen, Wales; 41. J. K. Raymond, England; 42. W. Hunter Robb, Scotland; 43. A. Steven, Scotland; 44. Thomas Gibson, Scotland; 45. C. J. Gorringe, Tasmania; 46. G. F. Lundie, M.A., South Africa; 47. H. M. Morton, England; 48. C. Gurney Thompson, England; 49. F. W. Twidale, India; 50. H. Armistead, England; 51. A. N. Davis, England; 52. J. D. Gilruth, Scotland; 53. G. J. Jenkins, Australia; 54. Walter Johnson, England; 55. J. A. Thwaits; 56. James Wood, Scotland; 57. Noel Bardswell, England; 58. W. C. Coulthard, England; 59. G. P. Henderson, England; 60. J. Sackville

Martin, Ireland ; 61. F. J. Robert Momple, Mauritius ; 62. R. G. Selby, England ; 63. Thomas Dewar, Scotland ; 64. A. W. Easmon, West Africa ; 65. J. Gilchrist, Scotland ; 66. Lewis Grant, Scotland ; 67. P. T. Herring, New Zealand ; 68. D. M. Mackay, England ; 69. G. H. Masson, West Indies ; 70. R. Owen, Wales ; 71. L. A. Williams, England ; 72. R. Gardner, Scotland ; 73. J. Macmillan, Scotland ; 74. Joseph Mason, England ; 75. Fred. Wills, British Guiana ; 76. W. J. A. Erskine, Scotland ; 77. W. G. C. Geekie, Scotland ; 78. J. G. Hewison, Scotland ; 79. R. L. Moorhead, England ; 80. J. H. D. Roberts, India ; 81. D. R. Rowlands, Wales ; 82. J. T. Shirlaw, Scotland ; 83. W. M. Macdonald, New Zealand ; 84. J. A. Terras Bell, New Zealand ; 85. D. Campbell Gray, Scotland ; 86. J. M. Crawford, Ireland ; 87. R. P. Hill, Australia ; 88. J. F. Lindsay, Scotland ; 89. G. A. Welsh, Scotland ; 90. H. Halton, England ; 91. W. A. W. Moore, Ireland ; 92. S. G. Ogilvy, Scotland ; 93. H. Richardson, India ; 94. G. E. Stewart, Canada ; 95. A. G. Carment, India ; 96. J. Henderson, Ireland ; 97. R. Roycroft, Ireland ; 98. H. G. Waugh, Australia ; 99. S. Ducat, Scotland ; 100. G. Scott Brown, Scotland ; 101. T. D. Sadler, Scotland ; 102. A. M. Fleming, Scotland ; 103. J. Bruce, Scotland ; 104. H. Jones ; 105. J. H. Dixon, England.

The following gentlemen were prevented by illness from attending one of the examinations. They obtained the following percentages in the other two examinations :—D. F. Dewar, England, 83 per cent. ; R. G. Ralston, Scotland, 80 ; J. M. Dalziel, India, 76 ; Stuart M'Donald, Scotland, 76 ; A. C. Sturrock, Scotland, 75 ; J. A. Forrest, West Indies, 75 ; J. A. Rees, Wales, 68 ; J. W. De Vos, South Africa, 68 ; J. G. Macmillan, Australia, 66.

A. R. SIMPSON, M.D., *Professor.*

PRACTICE OF MEDICINE.

SENIOR DIVISION.

First-Class Honours.—1. John M. Dalziel, India ; 2. E. D. W. Greig, Edinburgh (*Medallists*) ; 3. John Forbes, M.A., B.Sc., Muir of Ord ; 4. J. Kirk, Scotland ; 5. D. J. Graham, Glenboig ; Richard Owen, Wales ; J. R. Watson, M.A., B.Sc., Falkirk ; and James Wood, Scotland —equal ; 9. N. Caine, Liverpool, and D. M. Hutton, Liverpool —equal ; 11. G. R. Livingstone, Scotland ; 12. W. Leslie Lyall, Scotland ; W. C. W. M'Dowell, B.A., New Zealand ; and G. Douglas M'Rae, Penicuik—equal ; 15. Ian D. C. Howden, Scotland.

Second-Class Honours.—16. George L. Proctor, England ; 17. Robert M'Camon, Stranraer ; 18. Michael Hughes, Wales, and E. W. K. Scott, Wales—equal ; 20. Albert A. Fenn, England, and

T. T. Ormerod, Yorkshire—equal; 22. Ernest S. Reid, England, and L. A. Williams, Chester—equal; 24. A. M. Love, Ireland, and J. E. E. Roddis, England—equal; 26. D. J. Jones, Wales; W. L. Martin, Edinburgh; Joseph Mason, Yorkshire; R. L. Moorhead, London; and T. Stuart, England—equal; 31. R. Gardner, Edinburgh; 32. Robert Cross, England; 33. A. N. Davies, England, and Gerald Wallace, Glasgow—equal; 35. H. E. Huntly, London; 36. H. J. Ewald, Haiti; 37. B. J. G. Sibbald, Scotland, and J. H. D. Roberts, India—equal; 39. R. P. Heddle, Scotland; 40. George W. Mackintosh, Scotland.

The following gentlemen were absent from one examination:—

First-Class Honours.—1. A. W. Shields, Irvine.

Second-Class Honours.—2. N. H. Macmillan, South Africa; 3. J. Ogilvy Veitch, Edinburgh; 4. E. M. Skeete, Barbadoes.

JUNIOR DIVISION.

First-Class Honours.—1. T. H. Macfie, Whithorn; 2. J. H. Henderson, New Zealand; and David Waterston, Scotland—equal; 4. James Stenhouse, Scotland; and J. C. Stuart, M.A., Yorkshire (*Medallists*); 6. James Gray, Dundee; 7. A. Corsar Sturrock, M.A., Linlithgow; and James Watt, New Zealand—equal; 9. W. J. C. Coulthard, England; John Eason, Leith; and G. F. Lundie, M.A., Cape Colony—equal; 12. Robert M. Leith, Cape Colony; 13. W. M. Macdonald, New Zealand; George Henry Masson, Trinidad; and Hugh Richardson, India—equal; 16. A. Lewis Husband, England; and E. Lloyd Owen, Wales—equal; 18. Harry Armitstead, England; G. J. Blackmore, New Zealand; Fred. Gardiner, Edinburgh: A. P. Low, Arbroath; and Arthur D. Peill, Madagascar—equal.

Second-Class Honours.—23. Lewis Grant, M.A., Scotland; and J. Leslie Marjoribanks, East Lothian—equal; 25. J. D. Gilruth, M.A., Forfarshire; R. Roycroft, Ireland; and F. S. C. Thompson, Queensland—equal; 28. J. Mandell Coates, Perth; W. H. C. Foster, England; Alexander Steven, Edinburgh; and G. F. Whyte, Nairnshire—equal; 32. James Allison, Carluke; J. Brunton Blaikie, Roxburghshire; Thomas Gibson, Scotland; Robert G. Ralston, Glasgow; D. R. Rowlands, North Wales; and H. Cardale, England—equal; 37. Walter F. Eason, Scotland; G. P. Henderson, Redcar; P. C. Lüttig, Cape Colony; and J. K. Raymond, England—equal; 42. S. J. Gilfillan, Stirling; and F. Bedingfeld Macdonald, Scotland—equal; 44. James M. Crawford, Ireland: James Muir Grieve, M.A., Scotland; Lawrence Ker, M.A., Leicester; Charles MacLaurin, New South Wales; and J. T. Shirlaw, Loanhead—equal; 49. John Henderson, Ireland; and J. Arthur Rees, South Wales—equal; 51.

Duncan M. Mackay, Hull; and F. W. Twidale, India—equal; 53. H. G. Brown, Scotland; N. D. Bardswell, England; James Davidson, England; John M. Dawson, Kinghorn; J. Fisher Lindsay, Lanarkshire; A. Macarthy Morrogh, County Cork; H. Carden Pearson, England; and J. W. de Vos, Cape Colony—equal; 61. W. J. Penfold, Brampton; Arthur J. A. Theobald, England; and H. G. Waugh, New South Wales—equal; 64. F. J. C. Botha, Africa; S. H. Carr, Carlisle; D. E. Dewar, Northumberland; James Sackville Martin, Ireland; D. Macdonald, Scotland; John Macmillan, Edinburgh; and J. A. Thwaite, Cape Colony—equal; 71. John Bruce, Perthshire; W. G. C. Geekie, Perthshire; R. P. Hill, New South Wales; Thomas Duncanson Sadler, Edinburgh; and Fred. F. Wills, British Guiana—equal; 74. A. M. Fleming, Partick; J. F. Holden, England; Henry Jones, England; and Edward F. Wills, Madagascar—equal; 78. J. Hubert Dixon, Nottingham; J M'Donald, Argyleshire; and M. Simivasa Rau, Madras—equal; 80. Robert M. Gibson, Scotland; and Henry Halton, England—equal; 82. A. J. Park, New South Wales; and A. D. Yule, Arbroath—equal; 84. John Crawford, Ceylon; and R. B. Purves, India—equal; 86. Walter Johnston, England; 87. J. Trevor Williams, Wales; 88. E. Arkwright, England; and R. Stuart Rodger, England—equal; 90. J. A. T. Bell, New Zealand; 91. A. G. Carment, India.

The following gentlemen have been absent from one examination:—

First-Class Honours.—1. George Henderson, Perthshire; 2. A. L. Pentland Smith, Scotland; 3. H. M. Morton, Cumberland.

Second-Class Honours.—J. R. Lord, England; Andrew Wallace, Prestonpans; J. A. Forrest, Antigua; J. G. P. Murray, Gosport; C. J. Gorringe, Tasmania; Walter Jagger, England; G. Lloyd Roberts, Wales; W. H. Steele, Devon.

T. GRAINGER STEWART, Kt., M.D., *Professor.*

SPECIAL COURSE IN PUBLIC HEALTH.

First-Class Honours.—1. A. P. Low; 2. F. M. Gibson, B.Sc. (*Medallists*); 3. Daniel Brough; 4. D. J. Graham; 5. J. C. Stuart, M.A.; 6. E. Lloyd Owen; 7. James Allison and George H. Masson—equal; 9. G. J. Blackmore and W. G. C. Geekie—equal.

Second-Class Honours.—11. James Gray; 12. D. M. Mackay; 13. John Easson and A. D. Yule—equal; 15. J. T. Hewetson and Lewis A. Williams—equal; 17. A. M. Fleming, John Forbes, James Fisher Lindsay, and Andrew Wallace—equal; 21. A. C. Sturrock, M.A.; 22. Richard Owen and James Stenhouse—equal; 24. James M. Grieve and David Waterston—equal; 26. Kenneth

MacLean; 27. W. J. C. Coulthard, H. A. Leebody, and Robert Owen—equal; 30. J. Gilchrist and E. W. K. Scott—equal; 32. George King; 33. J. M. Coates; 34. Walter F. Eason, Wilfred Glegg, John J. Hewison, Laurence Ker, J. Kirk, and J. W. de Vos—equal; 40. J. T. Bell, R. M. Leith, and H. G. Waugh—equal; 43. F. W. Twidale; 44. Scott Carmichael, C. J. Gorringe, H. E. Huntly, George J. Jenkins, and Arthur D. Peill—equal; 50. John Henderson, S. G. Ogilvy, and J. K. Raymond—equal; 53. William Evans, J. Sutherland Fraser, and Lewis Grant, M.A.—equal; 56. John Bruce, P. C. Luttig, W. J. Penfold, W. M. Taylor, and R. S. Wells—equal.

DOUGLAS MACLAGAN, Kt., M.D., *Professor.*

Examination Papers for Degrees in Medicine.

PRELIMINARY EXAMINATION.

ENGLISH.

Saturday, 29th September 1894.—9 *to* 11 *o'clock.*

FIRST PAPER.

(FIVE *Questions are to be answered, and no more. Questions* 1, 2, *and* 6 *must be attempted by all.*)

1. Write an Essay, about two pages long, on either of these subjects—

(1) The Black Bear of Cumnor, and its host.
(2) "He is well paid that is well satisfied."

2. Paraphrase—

Could great men *thunder*
As Jove himself does, Jove would ne'er *be* quiet,
For every pelting petty officer
Would use his heaven for thunder;
Nothing *but* thunder. Merciful heaven!
Thou *rather* with thy sharp and sulphurous bolt
Splitt'st the unwedgeable and gnarled oak
Than the soft myrtle; but man, proud man,
Drest in a little brief authority,
Most ignorant of *what* he's most assur'd,
His glassy *essence*, like an angry ape,
Plays such fantastic tricks before high heaven
As makes the angels weep; who, with our spleens,
Would all themselves laugh *mortal.*

3. Parse the italicised words in the foregoing quotation. Give a general analysis of the following, stating exactly how the clauses are related to one another: "It was thus he avoided Warwick, within whose Castle Elizabeth had passed the previous night, and where she was to tarry until past noon, at that time the general hour of dinner throughout England, after which repast she was to proceed to Kenilworth."

4. Derive any *six* of the following words: *Activity*, *calculate*, *daisy*, *domain*, *faith*, *heaven*, *master*, *people*, *period*, *preliminary*, *press*, *sovereign*.

5. What is meant, in composition, by Periodic Structure and Balanced Sentence? Define any three of the figures of speech, and give an example of each.

6. Criticise, and make any corrections in, the following sentences:—

(1) My functions are of a more complicated character than usually is assigned to occupants of this chair.

(2) It would be a great service to historical truth, if anyone who could throw light on this matter would publish what they know.

(3) Lying on her bed, the very face of the doctor entering the room brought a message of encouragement.

(4) He did not more possess knowledge than was communicative of it.

Saturday, 29th September 1894.—12 *to* 2 *o'clock.*

SECOND PAPER.

(EIGHT *questions are to be answered, and no more; and, of these,* TWO *from each section.*)

A.

1. Name four pre-Elizabethan writers; mentioning their principal works, and indicating their importance in the history of English literature.

2. Write a brief account of the authors of any *six* of the following:—*The Satire of the Three Estates*, *The Counterblaste to Tobacco*, *Arcadia*, *The New Atlantis*, *Comus*, *Absalom and Achitophel*, *The Vanity of Human Wishes*, *The Deserted Village*, *Sartor Resartus*, *The Mill on the Floss*, *In Memoriam*, *The Ring and the Book*, *Hiawatha*.

3. Write an account of any famous English satire, and of any famous English allegory.

4. Name the chief poets of the Victorian era, and give some account of any one of them.

B.

5. Annotate the following :—

(1) I will not jump with common spirits.

(2) In such a night
Did Thisbe fearfully o'ertrip the dew,
And saw the lion's shadow ere himself,
And ran dismayed away.

(3) I wish Will Shakespeare no harm. . . . He stood, they say, a tough fight with the rangers of old Sir Thomas Lucy of Charlecot.

(4) It was thought that the young widow of France and Scotland would gladly have married an English baron.

(5) A Daniel come to judgment, yea, a Daniel.

6. What are the feelings that Shakespeare's delineation of Shylock arouses in us? At what points is our sympathy for Shylock elicited?

7. What are the prominent features of Elizabeth's character as brought out in *Kenilworth*, and how far are they true to history?

C.

8. Give some account of Hampden and Falkland.

9. Mention the chief battles of the Civil War, indicating their relative importance. Give dates.

10. Write brief expository notes on any *four* of the following :—The Hampton Court Conference, Ship-money, The Star Chamber, The Long Parliament, The Royal Society, The Cabal, The Treaty of Dover, The Siege of Londonderry, Blenheim.

11. What were the chief events that led up to the Revolution of 1688?

12. Give some account of Queen Anne, and indicate the leading events of her reign up to 1707.

D.

13. Where are the following, and for what are they famous :—Dumfries, Kilmarnock, Limerick, Benares, Adelaide, Mashonaland, Avignon, Bologna, Smyrna?

14. Trace by a sketch-map the Tay, the Forth, and the Clyde. Mark the counties through which each flows, and the chief towns on each.

15. Enumerate, and indicate the position of, the great shipping ports of England. Name the lakes of Central Africa and of Switzerland.

16. Draw an outline map of India, inserting the chief rivers, and marking the presidencies.

Saturday, 30th March 1895.—9 *to* 11 *o'clock.*

FIRST PAPER.

(*Five Questions to be answered, and no more. Questions* 1, 2, *and* 6 *must be attempted.*)

1. Write an essay, from two to three pages long, on one of the following subjects:—

(*a*) The Morality of Vivisection.
(*b*) The Battle of Waterloo.
(*c*) Robinson Crusoe.

2. Paraphrase:—

Lo, the poor *Indian!* whose untutored mind
Sees God in clouds, or hears Him in the wind;
His soul proud Science never taught to stray
Far as the solar walk or milky way;
Yet simple Nature to his hope has given,
Behind the cloud-topt hill, an humbler heaven;
Some safer world, in depth of woods embraced,
Some happier *island* in the watery waste,
Where slaves once more their native land behold,
No fiends *torment*, no Christians thirst for gold.
To be content his natural desire,
He asks no angel's wing, no seraph's fire;
But thinks, *admitted* to that equal sky,
His faithful dog shall bear *him* company.

3. Parse the words italicised in the above passage. Give a *general* analysis of the last four lines.

4. Derive any *six* of the following words: *Science, humble, angel, woman, extravagant, island, melancholy, morbid, surgeon, window, twenty, sovereign.*

5. Classify the following verbs according to their conjugation (weak or strong), and give the past indicative and past participle of each: *bid, bleed, five, bereave, do, seethe, chide.* Give also (*a*) the masculines of *heifer, gammer, goose, witch, belle*; (*b*) the two plurals of *cloth, die, genius, index*, with their different meanings; (*c*) examples of *indirect object, nominative, absolute, cognate, object.*

6. Improve the following sentences, and give reasons for the alterations you make:—

(*a*) The river Choaspes was supposed to furnish the only water fit for the consumption of the great king, and is said to have been carried about with him wherever he went.

(*b*) I decidedly prefer reading *Midshipman Easy* than the characterless *Masterman Ready.*

(*c*) Upon the death of Cromwell, his son Richard succeeded him in the Protectorate, but, finding it wiser to abdicate, the contests among the leaders brought about the Restoration.

(*d*) This question is as easy, if not easier, than the last.

Saturday, 30th March 1895.—12 *to* 2 *o'clock.*

SECOND PAPER.

(*Eight Questions are to be answered, and no more; and, of these, Two from each section.*)

SECTION A.

1. Describe *two* of the following characters: Rosalind, Shylock, Macbeth, Faithful, the Vicar of Wakefield, Meg Merrilies, Marmion, Sam Weller, the Princess Ida.

2. Who wrote the following poems: *l'Allegro, Ode at Alexander's Feast, The Loss of the Royal George, The Burial of Sir John Moore, The Battle of the Baltic, The Revenge?* Write an account of *one* of these poems.

3. What do you know of the life of Bacon, or Milton, or Swift, or Burke?

4. Give an account of the substance of *one* of the following: (*a*) any book of *Paradise Lost;* or (*b*) any canto of *The Fairy Queen;* or (*c*) *The Ancient Mariner.*

SECTION B.

5. Sketch the action of *Julius Cæsar* from the opening of the play to the assassination of Cæsar.

6. Compare the characters of Brutus and Antony.

7. Describe the scene in *The Fortunes of Nigel* where Nigel is introduced to the king.

8. Illustrate some of the characteristics of James I. by reference to particular Scenes in *The Fortunes of Nigel* (other than the scene mentioned in the last question).

SECTION C.

9. Write accounts of *two* of the following, so as to shew their historical importance: Walpole, the elder Pitt, the younger Pitt, George III., Canning, Wellington.

10. What were the main causes of the failure of the Jacobite risings of 1715 and 1745?

11. Sketch the history of the rise of the British power in India down to Pitt's India Act.

12. Write short expository notes on *three* of the following: The Septennial Act, the Letters of Junius, the Gordon Riots, the Declaration of Independence of the United States, the Causes of the Irish Rebellion of 1798, the Peninsular War, the Reform Bill of 1832.

SECTION D.

13. Explain and illustrate the following terms: Tropic, glacier, oasis, longitude, monsoon, plateau, archipelago.

14. Locate *nine* of the following places, and add descriptive notes on those you select: Quebec, Prague, Baltimore, Natal, Tyrol, Callao, Neuchwang, Delhi, Stroud, Lucknow, Portsmouth, Jaffa, Batavia, Kidderminster, Riga, Teheran, Barbadoes.

15. What are our most important colonies either (1) in Australasia, or (2) in North America? Name and locate eight of the chief towns in connection with either.

16. Draw a sketch map of France, and mark in it, in addition to the leading physical features,

(*a*) The capital and the most important manufacturing towns,
(*b*) The best wine-producing districts,
(*c*) The chief seaports;

or,

Name the leading industry in each of the following counties, and locate precisely its principal centre: Fife, Ayr, Lanark, Forfar, York, Warwick, Antrim, Roxburgh, Leicester, Glamorgan, Selkirk.

LATIN—GREEK—MATHEMATICS.

The Papers in Latin, Greek, and Mathematics are the same as the Lower Standard Papers in these subjects for Degrees in Arts and Science.

FRENCH.

Tuesday, 2nd October 1894.—3 *to* 6 *o'clock.*

I. Translate into English:—

L'art d'interroger n'est pas si facile qu'on pense: c'est bien plus l'art des maîtres que des disciples; il faut déjà avoir beaucoup appris de choses pour savoir demander ce qu'on ne sait pas. Le savant sait et

s'enquiert, dit un proverbe indien ; mais l'ignorant ne sait pas même de quoi s'enquérir. Faute de cette science préliminaire, les enfants en liberté ne font presque jamais que des questions ineptes qui ne servent à rien ; et puisqu'il ne faut pas qu'ils sachent tout, il importe qu'ils n'aient pas le droit de tout demander. Voilà pourquoi, généralement parlant, ils s'instruisent mieux par les interrogations qu'on leur fait que par celles qu'ils font eux-mêmes. Ainsi la première et la plus importante science qui leur convient n'est-elle pas d'être discrets et modestes? Et y en a-t-il quelque autre qu'ils doivent apprendre au préjudice de celle-là? Que produit donc dans les enfants cette émancipation de parole avant l'âge de parler, et ce droit de soumettre effrontément les hommes à leur interrogatoire? De petits questionneurs babillards, qui questionnent moins pour s'instruire que pour importuner, pour occuper d'eux tout le monde, et qui prennent encore plus de goût à ce babil par l'embarras où ils s'aperçoivent que jettent quelquefois leurs questions indiscrètes, en sorte que chacun est inquiet aussitôt qu'ils ouvrent la bouche. Ce n'est pas tant un moyen de les instruire que de les rendre étourdis et vains ; inconvénient plus grand à mon avis que l'avantage qu'ils acquièrent par là n'est utile ; car par degrés l'ignorance diminue, mais la vanité ne fait qu'augmenter. Le pis qui pût arriver de cette réserve trop prolongée serait que mon fils en âge de raison eût la conversation moins légère, le propos moins vif et moins abondant ; et en considérant combien cette habitude de passer sa vie à dire des riens rétrécit l'esprit, je regarderais plutôt cette heureuse stérilité comme un bien que comme un mal.—ROUSSEAU.

II. GRAMMAR :—

1. Give the French for—(*a*) Before six o'clock. (*b*) Before the looking-glass. (*c*) Look at the ships! (*d*) You look very tired. (*e*) My room looks upon a garden.

2. Write out the present indicative and the present subjunctive of *vouloir*.

3. Give the French for—(*a*) He is to go; (*b*) he must go; (*c*) he ought to go; (*d*) he ought to have gone; (*e*) he has just gone; (*f*) he might go; (*g*) he might have gone; (*h*) he would go; (*i*) he would have gone.

4. Give the English for—Tôt ou tard, à tâtons, à reculons, se moquer de, tenir tête à, en vouloir à quelqu'un, il ne sait à quoi s'en tenir, à qui en a-t-il?

5. Write out the perfect definite (preterite) and pluperfect indicative of *se plonger*, using the feminine pronoun in the third pers. sing. and plural.

III. Translate into French :—

A. (1) A poor old bare-footed man was standing at the corner of the street. (2) He was asking alms of all the passers-by. (3) He

made him go out of the room at once. (4) He made him feel some of the pain he had caused to other people. (5) This idle fellow used to lie in bed till mid-day.

B. It looks like yesterday, that voyage up the Rhône! I see still the steamer, its passengers, its crew; I hear the noise of the paddle-wheels and the whistle of the engine. The passage lasted three days; these three days I spent on deck, going down to the saloon merely to eat and sleep. The remainder of the time I used to pass at the extreme end of the boat, near the anchor. There was a large bell there which was always rung when we came to any of the towns; I used to sit down beside this bell on a heap of ropes, I placed the parrot's cage between my legs and looked about me. The Rhône was so wide that one could hardly see its banks. For my part I could have wished it wider, and that it had been called the Sea!

Tuesday, 2nd April 1895.—3 *to* 6 *o'clock.*

I. Translate into English:—

Danton était un révolutionnaire gigantesque. Aucun moyen ne lui paraissait condamnable, pourvu qu'il lui fût utile; et selon lui, on pouvait tout ce qu'on osait. Danton, qu'on a nommé le Mirabeau de la populace, avait de la ressemblance avec ce tribun des hautes classes; une voix forte, un geste impétueux, une éloquence hardie, un front dominateur. Leurs vices aussi étaient les mêmes; mais ceux de Mirabeau étaient d'un patricien, ceux de Danton d'un démocrate; et, ce qu'il y avait de hardi dans les conceptions de Mirabeau, se retrouvait dans Danton, mais d'une autre manière; parce qu'il était, dans la révolution, d'une autre classe et d'une autre époque. Ardent, accablé de dettes et de besoins, de mœurs relâchées, s'abandonnant tour à tour à ses passions ou à son parti, il était formidable dans sa politique, lorsqu'il s'agissait d'arriver à son but, et redevint nonchalant après l'avoir atteint. Ce puissant démagogue offrait un mélange de vices et de qualités contraires. Quoiqu'il se fût vendu à la cour, il n'était pourtant pas vil: car il est des caractères qui relèvent jusqu'à la bassesse. Il se montra aussi exterminateur, sans être féroce: inexorable à l'égard des masses, humain, généreux même, pour les individus. Une révolution à ses yeux était un jeu, où le vainqueur, s'il en avait besoin, gagnait la vie au vaincu. Le salut de son parti passait pour lui avant la loi, même avant l'humanité, c'est ce qui explique ses attentats après le 10 août, et son retour à la modération quand il crut la république affermie.—MIGNET.

II. GRAMMAR.

1. Il y avait un bateau: il y avait cent bateaux. Explain why in the second sentence the verb *avoir* remains in the singular.

2. When is the English pronoun *I* to be translated by *je* and when by *moi*, and the English *him* by *le* and when by *lui*? Give examples.

3. What is the meaning of the expression *n'est-ce pas*, and when is it used?

4. After which words is the indefinite pronoun *on* written *l'on*? Add, if possible, the reason why the letter *l* is used in these cases to prevent the meeting of two vowel sounds.

5. Use in the plural: *c'est lui*, *notre hôpital*, *son beau-frère*, *celui-ci*, *avant-poste*.

III. Translate into French:—

(*a*) Benjamin West was about seven years old, and yet he had a niece. We may believe that he was one of the youngest uncles that lived in this world. His sister was grown up and married, and it was her little daughter Sally who was his niece. Sally and her mother had come to stay at Springfield in Pennsylvania, where little Ben and his mother lived, or rather, I should say, Sally had been brought by her mother, for she was much too young to come. She was even younger than her uncle, and spent most of her time in a cradle. In this cradle she was left one day, while her mother and grandmother went into the garden to pick roses, and her uncle was told to sit beside her, and see that nothing happened to her.

(*b*) 1. Did you hear all he said? 2. I did not know he had come. 3. They were all very glad to see him. 4. She is nearly as tall as he. 5. He spoke so low that I could hardly understand a word of what he was saying. 6. What a beautiful town! 7. He was born on the first of August. 8. It is so hot, let us go into that wood!

GERMAN.

Wednesday, 3rd October 1894.—3 *to* 6 *o'clock.*

I. Translate into English:—

Die von Luther gewählte Form trug in ſich ſelbſt die Bürgſchaft für eine weitausgreifende Wirkung, denn mit vollem klarem Bewußtſein hat er ſich für diejenige Sprache entſchieden, die ſchon jetzt einer gewiſſen allgemeinen Geltung ſich erfreute. „Ich brauche die gemeine deutſche Sprache, daß mich beide, Ober- und Niederländer verſtehen mögen; ich rede nach der ſächſiſchen Kanzlei, welcher alle Fürſten und Könige in Deutſchland nachfolgen." Wie Luthers Sprache ſich weiter verbreitet hat, darüber ſind wir im einzelnen noch nicht zur Genüge unterrichtet. Jedenfalls war ihr Siegeslauf kein ſo raſcher, wie das Wort, „Luther der Schöpfer der neuhochdeutſchen Schriftſprache" vermuten ließe. Auf verſchiedenen Seiten traf ſie auf kräftigen Widerſtand. Luthers Sprache

war von seinem Geist schwer zu trennen; sie war der Träger der protestantischen Ideen. So war ihr das Eindringen in katholischen Gegenden von vornherein erschwert; wie hartnäckig man hier der ketzerischen Sprache entgegentrat, mag der Umstand zeigen, daß noch Gottscheds Sprachlehre für katholische Geistliche ein verbotenes Buch war. Aber auch in protestantischen Gebieten ging das Vorschreiten langsam genug. Noch im Anfang des siebzehnten Jahrhunderts, im protestantischen Basel, schreibt Thomas Platter seine Selbstbiographie in alemannischer Mundart. Und noch 1671 erläßt die Berner Regierung eine Weisung an die Geistlichen, sich eines „ungewöhnlichen neuen Deutsch" zu enthalten, „welches den Verständigen nur ärgert und das gemeine Volk in ihrem Christentum nicht unterweist." Auf niederdeutschem Gebiete hat sich Luthers Sprache etwas rascher Bahn gebrochen. Dafür haben aber hier bis fast in unsere Tage die Bestrebungen nicht aufgehört, die darauf ausgingen, das Niederdeutsche zum Rang einer Schriftsprache zu erheben.

Behaghel („Die deutsche Sprache").

II. Grammar :—

1. Give the German for the following in the nom. sing. and nom. plur., adding the definite article :—Field, branch, leaf, forest, wall, power, town, volume, nail, shoe, shirt.

2. (*a*) Write out the pres. and impf. indic. of retten and schlafen; (*b*) the pres. and impf. subj. of fallen and sitzen; (*c*) the past participle of legen, liegen, lügen, zeihen, ziehen, zielen.

3. Distinguish between—

Er muß nicht gehen and Er darf nicht gehen.
Er wollte schreiben and Er würde schreiben.
Er möchte ein Künstler sein and Er mag ein Künstler sein.

4. Distinguish between the following :—Aussicht, Versicht, Uebersicht, Aussicht, Umsicht; verstehen, gestehen, entstehen, beistehen, ausstehen; einfach, einsam, einzig.

5. Write out the whole of the personal pronouns in all cases, singular and plural.

III. Translate into German :—

a. (1) I could not come yesterday, because I was unwell. (2) You could not do that if you tried. (3) I am sorry that I have not been able to come sooner. (4) He has not yet begun to write his letters; he begins always at six o'clock. (5) Why have you not sent for the doctor.

b. Go into the next room, and set your candle upon the table which stands by the stove. On the table you will find paper, pens, and ink. Put another piece of wood on the fire before you sit down to the table. Behind the door hangs my old coat, in one of the pockets of which you

will find a piece of paper. This will give you the address of the old friend who is now living abroad, and to whom I wish you to write. Tell him that I rejoice at his good fortune, and that I shall write to him as soon as I am better. Do not forget to place a screen (Schirm) in front of the stove—the screen which stands before the clock. Over the table hangs a looking-glass; bring it to me, but take care not to fall over the dog which is lying outside.

Wednesday, 3rd April 1895.—3 *to* 6 *o'clock.*

I. Translate into English :—

Die Sehnsucht nach der Heimat wurde endlich mächtig in mir; in der ganzen Zeit hatte ich nichts von meinem Vater gehört, und ich ergriff daher eine günstige Gelegenheit nach Hause zu kommen. Es ging nämlich eine Gesandtschaft aus Frankreich nach der hohen Pforte. Ich verdingte mich als Wundarzt in das Gefolge des Gesandten, und kam glücklich wieder nach Stambul. Das Haus meines Vaters aber fand ich verschlossen, und die Nachbarn erstaunten als sie mich sahen, und sagten mir, mein Vater sei vor zwei Monaten gestorben. Jener Priester, der mich in meiner Jugend unterrichtet hatte, brachte mir den Schlüssel; allein und verlassen zog ich in das verödete Haus ein. Ich fand noch Alles, wie es mein Vater verlassen hatte, nur das Geld, das er mir zu hinterlassen versprach, fehlte. Ich fragte den Priester darüber, und dieser verneigte sich und sprach: „Euer Vater ist als ein heiliger Mann gestorben; denn er hat sein Geld der Kirche vermacht" Dies war und blieb mir unbegreiflich; doch was wollte ich machen? Ich hatte keinen Zeugen gegen den Priester und mußte froh sein, daß er nicht auch das Haus und die Waaren meines Vaters als Vermächtniß angesehen hatte. Dies war das erste Unglück das mich traf. Von jetzt an aber kam es Schlag auf Schlag. Mein Ruf als Arzt wollte sich gar nicht ausbreiten, weil ich mich schämte den Marktschreier zu machen, und überall fehlte mir die Empfehlung meines Vaters, der mich bei den Reichsten und Vornehmsten eingeführt hätte, die jetzt nicht mehr an mich dachten. Hauff.

II. Grammar.

1. In how many different ways do the neuter substantives form their plural? Give examples.

2. Give comparative and superlative of alt, froh, hoch, viel, edel.

3. When are Du, Ihr, Sie respectively used in addressing one or several persons.

4. State the difference between wiſſen and kennen (English *know*): ſie kennen viel und wiſſen nichts; give further examples to illustrate the difference; between werden and ſein in the formation of the passive voice; between das Fremde, der Fremde, die Fremde.

5. Give the 1st person of the imperfect indicative and the past participle of müſſen, verſprechen, abreiſen, erziehen.

III. Translate into German:—

(*a*) The Duke of Wellington was a very kind man. He was walking in his garden one morning, when he saw a boy stooping down and doing something on the ground. As he came nearer, he saw that it was the son of one of his gardeners; but what he was doing he could not make out. So he walked up to the boy and said, "What are you doing?" The boy looked up. "I am feeding my frog," he said; "they are going to send me to school, and I am afraid it will die." "Never mind the frog," said the Duke, "go to school, and I will take care of it." He afterwards wrote a letter to the boy at school, to tell him that the frog was quite well.

(*b*) 1. He said he was very hungry. 2. Thinking all was lost, he fled. 3. Have you done what I told you? 4. He is tired, do not disturb him! 5. This book is not yours. 6. Do you see him coming? 7. I shall do what I have promised. 8. He told me that he had not seen you.

FIRST PROFESSIONAL EXAMINATION.

CHEMISTRY.

Monday, 23rd July 1894.—10 *to* 12 *o'clock.*

N.B.—*Express your meaning in words, and also by means of equations whenever possible.*

1. How can we obtain, either by a single process or by a series of processes (*a*) Sulphur from Potassium Sulphate; (*b*) Nitrogen from Ammonium Nitrate; (*c*) Hydrogen from Hydrogen Chloride; (*d*) Hydrogen from Caustic Potash; (*e*) Iron from Ferrous Sulphate; (*f*) Silver from Silver Chloride?

2. What is the action of strong aqueous solution of Hydrochloric Acid on each of the following—(*a*) Iron; (*b*) Cupric Oxide; (*c*) Lead Sulphide; (*d*) Potassium Nitrate; (*e*) Alcohol; (*f*) Hydrocyanic Acid?

3. What is the source of each of the following acids—(*a*) Citric Acid ; (*b*) Tartaric Acid ; (*c*) Acetic Acid ; (*d*) Nitric Acid ; (*e*) Phosphoric Acid ; (*f*) Oxalic Acid ?

Which of these acids are volatile ? What is the effect of heating on each of the non-volatile acids in the list above ?

4. How do you test for nitrates by means of a solution of Ferrous Sulphate ?

Give a full explanation of the process.

5. 50 c.c. of a given solution of Hydrochloric Acid are exactly sufficient to precipitate as Silver Chloride, the whole of the Silver from 2 grammes of Silver Nitrate. What weight of Caustic Soda would be exactly neutralised by 100 c.c. of this solution. Calculate the result to three places of decimals.

H = 1, Cl = 35·5, Na = 23, Ag = 108, N = 14, O = 16.

Monday, 25th March 1895.—10 *to* 12 *o'clock.*

N.B.—*Express your meaning in words, and also by means of equations whenever possible.*

1. Give the formulæ of the oxides of Lead.

What is the action upon each of them of :—

(*a*) Hydrochloric Acid ?
(*b*) Nitric Acid ?

2. What takes place when an aqueous solution of bleaching powder is boiled ?

What is the action on an aqueous solution of bleaching powder of :—

(*a*) Carbonic Anhydride ?
(*b*) Hydrochloric Acid ?

3. How is Ammonia Gas prepared from Ammonium Sulphate ?

What are the products of the combustion of Ammonia in Oxygen ?

What is the action of Ammonia on Sulphuretted Hydrogen ?

4. How is Tartaric Acid prepared ?

How is Tartar Emetic prepared ?

Compare the reactions of Tartar Emetic with those of Antimony Chloride.

5. What volume of Nitrogen, in litres at Standard temperature and pressure, can be obtained from 100 grammes of Ammonium Nitrite ?

H = 1, N = 14, O = 16.

22·33 litres of Hydrogen weigh 2 grammes at Standard temperature and pressure.

Calculate to two places of decimals.

ELEMENTARY BOTANY.

Monday, 23rd July 1894.—1 *to* 3 *o'clock.*

(*Illustrate by Drawings the answers that admit of illustration.*)

1. Give an account of the processes of gas-interchange that take place between green-plants and the atmosphere. Point out (*a*) the significance of these processes to the plant, and (*b*) their effect upon the atmosphere.

2. Describe the formation and mode of exit of lateral rootlets in the primary root of a dicotyledonous plant.

3. Describe the structure of an ovule, and point out the use of its several parts.

4. Give a detailed account of the sexual act in any plant. Describe the product of the act in the plant you select, and compare this product in the four leading groups of the vegetable kingdom.

5. What is symbiosis? Give an example of it, and shew what is its result in the case you mention.

Monday, 25th March 1895.—1 *to* 3 *o'clock.*

(*Illustrate your answers by Drawings.*)

1. Give an account of the structure of the ovule in *Pinus* at the period when it is ready for fertilisation. Describe the process of pollination in *Pinus.*

2. What is the structure of a bud in the Spermaphyta? Describe the different kinds of bud known to you as occurring in plants. What is the use of buds?

3. Write a short account of the relationship of plants to temperature.

4. Write an account of the life-history of *Vaucheria.*

5. What do you understand by the term Bark? Describe the formation of Bark in *Ulmus.*

ELEMENTARY ZOOLOGY.

Tuesday, 24th July 1894.—10 *to* 12 *o'clock.*

1. What are the chief peculiarities in the skeleton of a bird, and what evidence is there that birds are related to reptiles?

2. Indicate by means of diagrams and short descriptions the differences between transverse sections of Paramoecium, Hydra, Arenicola (gill-bearing region), and Raia (branchial region).

3. Give the distinguishing characters of the Dipnoi, a classification of the group, and the distribution of the existing forms.

4. What are the Anthropoid Apes and where do they occur? By what characters may they be distinguished from the monkeys.

One only of the following.

5. What is alternation of generations? Illustrate your answer by an account of the life-history of Distoma?

6. Describe shortly the formation, structure, and function of the placenta; mention the different forms it assumes and some of the advantages the possessors of a placenta have over other vertebrates.

Tuesday, 26th March 1895.—10 *to* 12 *o'clock.*

(*Only Four Questions to be answered.*)

1. Describe the heart of (i) a Fish, (ii) a Frog, and (iii) a Pigeon; and point out the changes which arise in the circulatory system when a change from water-breathing to air-breathing takes place.

2. In what respects do (i) the Monotremata, and (ii) the Marsupialia differ from the higher Mammalia? Give a short account of the geographical distribution of both these two orders.

3. Describe the formation of the Mesoblast in *either* the egg of an Amphioxus *or* of a Frog. What structures in the adult are derived from the Epiblast, and what from the Hypoblast?

4. Point out how Paramœcium and Hydra differ in structure and development.

5. State in what respects Amphibians agree with Fish, and differ from Reptiles.

PHYSICS.

Tuesday, 24th July 1894.—1 *to* 3 *o'clock.*

(*Six questions at most to be attempted.*)

1. What is the relation between the tension of a spherical membrane and the pressure in its interior? If a strip of the membrane, an inch broad, can just support 10 lbs.; what pressure will burst the bag if its radius is 3 inches?

2. State the conditions for distinct vision by an ordinary eye. What is the cause of shortsightedness, and why can it be remedied by the use of a concave lens?

3. Define the terms Stress and Strain. What is the general relation between them in ordinary solids:—and what are their simplest forms as employed to measure respectively, Compressibility and Rigidity?

4. What is meant by the term Latent Heat? Mention some of the chief consequences of the great latent heat of steam.

5. What is, objectively, a musical sound, and by what data can it be fully specified? What are the corresponding characteristics of light, and why is an additional specification required?

6. What is the proper function of a lightning-rod, and upon what principles does its efficacy depend?

7. Describe the process called Dialysis; and point out, in general terms, its physical basis.

8. Define the Capacity of an electrified Conductor, and its Potential. How does the energy of the charge depend upon them?

9. State, generally, the laws of the steady flow of liquids in tubes, and show how they are modified by viscosity. In what respects are they analogous to those of galvanic currents?

Tuesday, 26th March 1895.—1 *to* 3 *o'clock.*

(*Only Four of the following Questions to be answered.*)

1. Define the terms Work Done by a Force, and Moment of a Force, about a point. Illustrate their connection by a discussion of the Principle of the Lever.

A uniform rod, 2 feet long, weighs 1 lb. Where must it be supported so that a mass of 2 lbs., hung at one end, may balance a mass of 3 lbs., hung at the other?

2. Give a general account of the manner of formation of Fogs and Clouds:—and of the cause of their apparent suspension in the air. Is there any reason for changes of temperature when a fog forms or clears off?

3. Describe any two of the following instruments, and discuss the principle of the action of each when in use:—

(1) The Piezometer.
(2) Spectacles for short-sightedness.
(3) The Voltameter.
(4) An Organ Pipe.

4. How would you find the focal length of a convex lens, and how could you employ it in finding that of a concave lens?

Draw a sketch of the pencil of rays by which any point of an object is seen through a convex lens, employed as a simple microscope.

5. State Ohm's and Joule's Laws in current electricity. Can the one be deduced from the other?

Two wires of the same length and material, but of cross-sections which are as 10 to 1, are joined in multiple arc, and made part of a circuit in which a current is flowing. Compare the amounts of heat evolved, and the consequent increments of temperature, in the two wires.

6. Why is a narrow tube more able to resist internal pressure than is a wide one, whose walls are of the same material, and of the same thickness?

When two tubes of the same material are to be made equally strong, how must the thickness vary with the bore, and why?

SECOND PROFESSIONAL EXAMINATION.

ANATOMY.

Wednesday, 18th July 1894.—10 *to* 12 *o'clock.*

1. Describe the position and relations of the Liver. How is the peritoneal membrane arranged in connection with it? Give the relations of the structures in the Portal fissure; follow them into the liver, and state their arrangements in connection with the Hepatic Lobules.

2. Trace the Internal Jugular Vein down the neck, from its origin to its termination. What is its relation to the arterial and nervous trunks? Name the veins which open into it.

3. Give, step by step, the dissection necessary to expose the Ulnar Artery in the forearm. What branches arise from it in this dissection?

4. Describe the position and boundaries of Hunter's Canal in the thigh. What structures traverse it, and how are they arranged within it?

Thursday, 28th March 1895.—10 *to* 12 *o'clock.*

1. Describe the origin, course, distribution, and anastomoses of—

(*a*) The Circumflex arteries of the upper limb;
(*b*) The Circumflex arteries of the thigh.

2. Write a detailed account of the dissection required to expose the Hypoglossal Nerve from the anterior condyloid foramen to its terminal distribution. Enumerate the muscles which it supplies.

3. Trace the Vas Deferens from its origin at the testicle, to its termination; and state its relations in the different parts of its course.

4. Describe the arrangement of the Pleural Membranes in relation to the viscera and parietes of the Thorax and to each other. What is the structure of the free surface of the pleura as seen under the microscope?

PHYSIOLOGY.

Wednesday, 18th July 1894.—1 *to* 3 *o'clock.*

1. (*a*) How is Fibrinogen prepared, and what are its chemical properties?

(*b*) What conditions retard and accelerate the coagulation of the blood when withdrawn from the vessels, and also when still inside the vessels?

(*c*) What are the conditions necessary for coagulation, and what analogy is there between the coagulation of blood and that of milk?

2. (*a*) Describe the minute structure of the nerve fibres met with in a spinal nerve, and that of the nerve cells met with in the intervertebral ganglia, and anterior vesicular column of the spinal cord.

(*b*) Trace in the spinal cord the paths of the afferent impulses from a spinal nerve that give rise to spinal reflex action, and to sensation, respectively.

(*c*) On what grounds is it asserted that the brain normally exerts a restraining influence on the nerve centres of the spinal cord?

3. State fully what is known regarding the functions of the elasticity (*a*) of the crystalline lens; (*b*) of the walls of the air vesicles; (*c*) of arteries and capillaries; (*d*) of voluntary muscles; and (*e*) of the ventricles of the heart.

Thursday, 28th March 1895.—1 *to* 3 *o'clock.*

1. What are the successive changes produced in boiled fibrin by artificial peptic digestion? How could you prove the presence of the chief substances produced, and what is the theory of the changes that occur?

2. Give an account of the actions of the nervous and muscular apparatus concerned in the retention of urine in the bladder, and in the Act of Micturition.

3. Describe (*a*) the boundaries and connections of the Cochlear Canal or Scala Media; (*b*) the minute structure and arrangement of all the parts of Corti's Organ; and (*c*) the relation of the auditory nerve to its cochlear terminals.

(*d*). State the order in which a sound-wave affects the several structures you have described.

(*Aid your descriptions by sketches when desirable.*)

MATERIA MEDICA.

Thursday, 19th July 1894.—10 *to* 12 *o'clock.*

1. Define *Diaphoretic*, *Tonic*, and *Astringent;* and explain the different actions by which each effect is produced.

2. Describe the preparation, physical and chemical characters, and uses of *Acetate of Potash*, and state its dose for each principal use.

3. Describe briefly the symptoms produced by the inhalation of *Chloroform*. What are the chief dangers of its inhalation, and on what pharmacological actions are they dependent?

4. What are the actions and uses of *Dilute Hydrocyanic Acid?* Mention its doses, and the other officinal preparations which contain free hydrocyanic acid.

5. What is *Elaterium?* Mention its dose, active principle, and officinal preparation.

Friday, 29th March 1895.—10 *to* 12 *o'clock.*

1. Describe the physical and sensible characters of *Chloride of Ammonium*. State its therapeutic uses and doses.

2. What are the differences in action and use between *Ferrous and Ferric Compounds?* Give two officinal examples of each group of compounds.

3. What are the pharmacological actions of *Physostigmine?* What is its officinal preparation?

4. Mention the composition of *Asafoetida*. Describe its action and uses. State its doses, and the doses of two of its liquid preparations.

5. Enumerate the officinal *Hypodermic Injections*. Describe the therapeutic uses of each of them.

PATHOLOGY.

Thursday, 19th July 1894.—1 *to* 3 *o'clock.*

1. *Typhoid Fever.*—Describe the changes which may occur in various organs in typhoid fever.

2. *Cerebral Haemorrhage.*—What are the chief causes and the

commonest situations of cerebral haemorrhage? Describe the immediate and later effects on the brain substance and in the effused blood.

3. *Repair of Tissues.*—Describe the elementary processes of repair of epithelial and connective tissues.

4. *Capillary Bronchitis and Broncho-pneumonia.*—Describe the naked eye and microscopic appearances in acute broncho-pneumonia associated with capillary bronchitis.

Friday, 29th March 1895.—1 *to* 3 *o'clock.*

1. ANTHRAX. Give an account of the Anthrax Bacillus, including its Morphology and life-history. Describe the forms of disease which may be produced by its action.

2. Describe the naked eye and microscopic characters of the following tumours—Glioma, Myxoma, and Chondroma; and enumerate the principal sites in which they may occur.

3. Describe the changes which may be found in the Kidney in acute Nephritis.

4. Enumerate and describe the intracranial lesions which may be produced by Syphilis.

FINAL PROFESSIONAL EXAMINATION.

PRACTICE OF PHYSIC.

Monday, 18th June 1894.—10 *to* 12 *o'clock.*

(*Only three questions to be answered.*)

1. *Confluent Smallpox.*—In a moderately-severe example, describe the symptoms, ordinary course, terminations, and treatment.

2. *Pleurisy with serofibrinous effusion.*—Give the symptoms and physical signs which you would expect to meet with from the commencement of the affection to a favourable termination.

3. *Gastric Ulcer.*—Describe fully its etiology, pathology, symptomatology, and treatment.

4. *Facial Paralysis* (Bell's).—Describe fully its etiology, symptomatology, diagnosis, and treatment.

MEDICAL JURISPRUDENCE.

Monday, 18th June 1894.—1 *to* 3 *o'clock.*

I.—*Resuscitation from Drowning.*

Describe separately the "ready methods" of—

1. Marshall Hall.
2. Silvester.
3. Howard.

II.—*Phosporus.*

1. When do symptoms generally show themselves after swallowing?
2. What may be a fatal dose?
3. Describe the symptoms.
4. About what period may it prove fatal?
5. What post-mortem appearances might you find?

III.—*Suspected Infanticide.*

Describe in detail, with a view to reporting to the authorities, how you would conduct the post-mortem examination of the body of a new-born child found dead.

PUBLIC HEALTH.

Monday, 18th June 1894.—1 *to* 3 *o'clock.*

I.—*Smallpox and Vaccination.*

What, under equal conditions of age, is the duration of protection against attack by smallpox afforded by—

a. Vaccination?
b. Re-Vaccination?
c. An attack of the disease?

II—*Epidemic Diphtheria.*

1. A prevalence of Diphtheria is discovered in a village, situated in a District unprovided with Hospital accommodation. What considerations would chiefly influence you in the advice which you might give to persons in the village respecting the avoidance of infection?

III.—*Ventilation.*

Describe, without entering on minute details, the methods in use for ascertaining the state of ventilation of a room.

a. With reference to movement of air.

b. With reference to contamination of air.

c. What diseases, irrespective of infectious fevers, are found to be encouraged by sojourn in badly-ventilated apartments?

SURGERY.

Tuesday, 19th June 1894.—10 *to* 12 *o'clock.*

(*Only three questions to be answered.*)

1. Retention of Urine—

(*a*) In acute gonorrhœa.
(*b*) In prostatic enlargement.
(*c*) In organic stricture.

State the treatment under each head.

2. What is Intussusception? Where may it occur? How would you recognise it? What treatment would you adopt (*a*) in the child, (*b*) in the adult?

3. What are the traumatic affections of the Cornea? What complications may arise? Describe the treatment of one complication.

4. Describe the operation of—

(*a*) Excision of the head of the Femur.
(*b*) Excision of the head, neck, and trochanter major.

MIDWIFERY.

Tuesday, 19th June 1894.—1 *to* 3 *o'clock.*

(*All three questions to be answered.*)

I.—*Transverse Presentation.*

You are called to a case of Labour in a Multipara and find an arm prolapsed, the membranes having ruptured some hours previously;

1. What points would you take note of in making your diagnosis as to the condition of all the Factors?

2. What are the dangers to the Mother?

3. What different lines of treatment may have to be followed?

II.—*Puerperal Septicæmia.*

1. What are the Sources of Infection?
2. What are the conditions favouring Absorption?
3. What Prophylactic measures may be adopted?
4. Name three reliable Antiseptics, and describe their mode of Employment.

III.—*Prolapsus Uteri.*

1. Give the Pathological Anatomy.
2. Give the Causes.
3. Give the Operative Treatment.

CLINICAL MEDICINE.

Examinations, written, oral, and practical, on cases in wards of the Royal Infirmary.

CLINICAL SURGERY.

Examinations, written and oral, on the Symptoms, Diagnosis, and treatment of Surgical Cases in the wards of the Royal Infirmary.

Fellowships, Scholarships, Bursaries, and Prizes in Medicine.

I.—FELLOWSHIPS.

I.—THE SYME SURGICAL FELLOWSHIP.

This Fellowship, of the annual value of £105, and tenable for two years, is open to competition among Bachelors of Medicine and Masters in Surgery of not more than three years' standing, who shall, in the opinion of the Examiners, have passed a creditable examination for these degrees, and who shall present the best Thesis on a Surgical subject giving evidence of original research, or practical talent, whether such Thesis be given in for Graduation or otherwise. The next award may be at the Graduation Ceremonial in August 1897. *See* Deed of Foundation, at p. 310 of CALENDAR for 1872-73.

1891. Alexander Miles, M.D.	1893. Wm. Menzies Hutton, M.B., C.M. *Frox. access.* R. M. Horne, M.B., C.M.

II.—THE LECKIE-MACTIER FELLOWSHIP.

The Leckie-Mactier Fellowship, of the annual value of £80, is awarded to Bachelors of Medicine of not more than three years' standing, and is tenable for three years. The examinations comprise written reports and commentaries on medical, surgical, and gynecological cases in the University Wards in the Royal Infirmary, and written examinations in Midwifery, Medical Jurisprudence, and Public Health; also oral examinations in Medicine, Surgery, Midwifery, Medical Jurisprudence, and Public Health. Every holder of the Fellowship must, before the expiry of his tenure, transmit to, and if required read publicly in presence of the Medical Faculty, a communication embodying the result of original observation or historical research in some department of medicine. Next appointment may be made in November 1895. *See* Deed of Foundation at p. 365 of CALENDAR for 1880-81.

1892. *Carstairs Cumming Douglas, M.B., C.M., B.Sc.*

III. FREELAND BARBOUR FELLOWSHIP.

This Fellowship is of the value of £100, and is open to award, in each alternate year, to the Bachelor of Medicine and Master in Surgery who has gained the highest collective marks in Anatomy, Physiology, and Pathology in the Professional Examinations, and who is prepared to devote not less than one year to original research in Midwifery or diseases of women, in any of the Laboratories or Practical Departments of the University of Edinburgh. The next award will be made in July 1896. *See* Deed of Foundation at page 517 of CALENDAR for 1889-90.

1892. George Home, M.B., C.M.
1894. *Robert Ward Briggs, M.B., C.M.*

THE WILLIAM DICKSON TRAVELLING FUND.

This is a fund for the purpose of assisting Graduates of any Faculty, of not more than three years' standing, to travel for the purpose of study or research. For particulars, see page 358.

THE SWINEY LECTURESHIP ON GEOLOGY.

This Lectureship is in the patronage of the Trustees of the British Museum, is of the annual value of £144, and is open to Graduates in any of the Faculties of this University who have obtained their Degrees after Examination. For further particulars, see page 483.

II.—SCHOLARSHIPS.

I.—ETTLES SCHOLARSHIP IN MEDICINE.

This Scholarship was founded in 1868 by Miss Mary Ettles of Inverness, and is of the annual value of about £35. It is awarded annually to the Bachelor of Medicine and Master in Surgery of the University of Edinburgh, whom the Faculty of Medicine may consider the most distinguished of that year. *See* Deed of Foundation, at page 242 of CALENDAR for 1868-69.

1891. Harry Rainy, (M.A.), M.B., C.M.
1892. Robt. Murray Leslie (M.A., B.Sc.), M.B., C.M.
1893. Robert Hutchison, M.B., C.M.
1894. *James Purves Stewart (M.A.), M.B., C.M.*

II.—SIBBALD MEDICAL SCHOLARSHIP.

This Scholarship is of the annual value of £40. *First*, The Scholarship is bestowed on, and held by, a Student in the Faculty of Medicine in the University of Edinburgh, *who does not hold any other Scholarship or Bursary*, and is tenable for three years, during each year the Scholar must complete an *Annus Medicus* required from Candidates for the degree of Bachelor of Medicine. *Second*, It is bestowed upon the Student obtaining the highest place by Competitive Examination, and is open to all Candidates who have not previously been Students of Medicine in any other School or University, and who have attended Medical Classes in the University of Edinburgh, for *not less* than one Winter and one Summer Session, and for *not more* than one Winter and two Summer Sessions. The Competitive Examination is in Chemistry, Botany, Natural History, and Physics, and is conducted in such manner as the Senatus Academicus may, in concurrence with the Trustees, prescribe. The next competition may take place in October 1897. Application to be made to Messrs MACKENZIE, INNES & LOGAN, W.S., 23 Queen Street, Edinburgh.

1891. James R. Watson
1894. *D. B. Waters*

III.—THOMSON SCHOLARSHIP.

The Thomson Scholarship, value £40, tenable for four years, open to matriculated students commencing their first Winter Session in Medicine. The examination is on Botany, Zoology, and Elementary Mechanics. The Scholarship is awarded to the candidate who shall obtain the highest number of marks in the examination. The Trustees, however, reserve power to themselves to withhold the appointment should none of the candidates obtain a sufficiently high percentage of the marks in the examination. Candidates must send in their names to the agents for the Trust before the first

day of October in the year in which there is a competition for the Scholarship. Students of the name of Thomson or Traquair, or those who are natives of the town or county of Dumfries, or of the city of Edinburgh, have a preference. The next appointment may be made in October 1898. For other particulars, application to be made to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, Edinburgh.

1894. *James Masson.*

IV.—COLDSTREAM MEMORIAL MEDICAL MISSIONARY SCHOLARSHIP.

The Coldstream Memorial Medical Missionary Scholarship was founded in memory of the deceased John Coldstream, M.D., F.R.C.P.E. Value £25, tenable for four years. The holder must be a first year's Medical Student, who intends to devote himself to the life of a Medical Missionary at home or abroad. He must be approved of by the awarders, and pass the preliminary examination before beginning his studies. Next award in 1896. A preference is given to students connected with the Edinburgh Medical Missionary Society. A full copy of the conditions can be had on applying to John P. Coldstream, W.S., 3 Saxe-Coburg Place, Edinburgh. *See* Conditions in CALENDAR for 1879-80, p. 357.

1891. *James Hunter White.*

V.-XII.—VANS DUNLOP SCHOLARSHIPS.

Eight Scholarships, of £100 each, tenable for three years. Not more than one at a time can be held by the same person. *See* Excerpt from Will of Dr Vans Dunlop, p. 380 of CALENDAR for 1880-81.

V. *One* is awarded to the Candidate who, at either the March or the preceding October Medical Preliminary Examination, has obtained the highest number of marks in the Subjects required to enable him to appear for a Professional Examination, provided (1) that he has not already passed the said Preliminary Examination; and (2) that, in the event of his having passed an equivalent examination and presenting himself for the Medical Preliminary Examination, he shall waive all right to admission to the Faculty of Medicine except through the ordinary Medical Preliminary Examination of this University. The next award may be made in March 1896.

1893. *A. C. M'Gilchrist.*

VI. One is awarded for subjects of first year's study, viz., Botany, Zoology, Chemistry, and Anatomy,[1] to the Student who, having attended for the first time a systematic course of Lectures on each of the above Subjects during the preceding Winter Session, and also during either

[1] These Regulations will be altered before the next award.

the preceding or current Summer Session, obtains the highest number of marks collectively in the University Class Examinations in those Subjects ; provided that he has gained not less than 60 per cent. of the marks in each of all the Subjects. The successful Candidate shall continue his medical studies in this University during his tenure of the Scholarship. The next award may be at the end of July 1896.

1893. *E. F. Bashford.* Prox. access. *W. Hamilton.*

VII. One is awarded for subjects of second year's study, viz., Physiology and Surgery,[1] to the Student who, during the Winter Session, shall have attended, for the first time, a systematic course of Lectures on each of these Subjects, and who shall have obtained the highest collective number of marks in the Class Examinations ; provided that he has gained not less than 60 per cent. of the marks in each of the two subjects. The successful Candidate shall continue his medical studies in the University during at least two years of his tenure of the Scholarship, whilst the remaining year must be passed in study, either in this University, or in some other School of Medicine to be approved by the Faculty of Medicine. The next award may be at the end of March 1896.

1893. *Daniel Brough.*

VIII.-X. Three Scholarships, of which one is awarded annually at the end of the third Winter of Medical Study to the Student who, after having attended within the University the Subjects of Examination, shall obtain the highest number of marks in an Examination, specially conducted for the purpose, on Anatomy, Physiology, Materia Medica, and Pathology.[1] The successful Candidate is required to continue his studies in this University, for at least the first year of his tenure of these Scholarships, and during the remaining period to prosecute research in some branch of study comprised in the Medical curriculum. The award is made annually in April.

1891. Robert Hutchison
1892. R. W. Briggs
1893. Joseph Edward Bowes
1894. A. C. Sturrock
1895. *Edwin Matthew*

XI. One in Chemistry and Chemical Pharmacy.[1]

(1.) The Subjects of Examination are—

(*a*) Inorganic and Organic Chemistry, and the connection between the Chemical and Physical character of Substances.

(*b*) Qualitative and Simple Quantitative Analysis of Inorganic Substances, and the Preparation and Testing of the Chemical Substances in the British Pharmacopœia.

(2.) The Examination in subjects (*a*) is similar, and held at the same time, as that for the Second B.Sc. Examination. The Examination in subjects (*b*) is conducted practically in the Laboratory.

[1] These Regulations will be altered before next award.

(3.) The Competition is open to all Students of the University, from the second to the sixth year (inclusive) of their attendance, and will take place in March 1897.

1891. William Cossar Mackenzie, D.Sc.
1894. *William White Taylor, M.A.*

XII. One in Natural History, including Geology and Botany.[1]

(1.) The subjects Natural History, Geology, and Botany are coequal in the Examination, and the Examination in each of the three subjects is similar to that for the Second B.Sc. Examination, and consists of two parts—a Written Examination extending over not less than three hours, and a Practical Examination with specimens.

(2.) The next Examination will be held in April 1898, at the same time as the Second B.Sc. Examination.

(3.) The Competition is open to all Students of the University, from the second to the sixth year (inclusive) of their attendance.

1892. J. D. F. Gilchrist, B.Sc. | 1895. *J. A. Murray, B.Sc.*

XIII.—THE MURCHISON MEMORIAL SCHOLARSHIP.

This Scholarship consists of the annual proceeds of about £1000, awarded in alternate years in London and Edinburgh, for proficiency in Clinical Medicine. Candidates must be registered medical students who have attended for not less than four nor more than six years at Hospitals and Classes at Edinburgh or London, recognised by the University of Edinburgh or the Royal College of Physicians of London. The competition in 1896 will be held in London.

1893. David Arthur Welsh, M.B., C.M.
1894. *George F. Still, M.B.*

XIV.—STARK SCHOLARSHIP IN CLINICAL MEDICINE.

This Scholarship of £112, less expenses, is tenable for one year, and is for the encouragement of the study of Clinical Medicine. It is open to competition among all matriculated students of the University who are or have been in attendance at the University Class of Clinical Medicine, and to Bachelors of Medicine of the University of not more than eighteen months' standing who have attended this class. It is open to competition every second year alternately with the competition in Edinburgh for the Murchison Memorial Scholarship. The Examination, oral and in writing, shall include (*a*) Examination of Patients; (*b*) Questions on Therapeutics and Pathology; (*c*) Examination of Specimens. Each holder of the Scholarship is required to devote his time in the wards of the Professors of Clinical Medicine to original investigation or other work directly connected with Clinical Medicine; to report his proceedings every

[1] These Regulations will be altered before next award.

three months to the Professors of Clinical Medicine; and, within a reasonable time after the expiry of his tenure of the Scholarship, to present to the Faculty of Medicine a written statement of the results of his investigations or other work. This Scholarship cannot be held along with any other Fellowship, Scholarship, or Bursary in a Scottish University. The next Competition will take place in July 1896. *See* Deed of Foundation at p. 427 of CALENDAR for 1884-85.

1892. Robert Murray Leslie (M.A., B.Sc.), M.B., C.M.
1894. *Robert Hutchison, M.B., C.M.*

XV.—BUCHANAN SCHOLARSHIP.

This Scholarship, of the value of about £40, 10s., founded by Mrs Jane Jack or Buchanan, Moray Place, Edinburgh, is awarded annually to the Graduate in Medicine of the year who has shown the highest proficiency in Midwifery and Gynecology, as evidenced in (1) the Class Examinations of Midwifery and Diseases of Women and Children; (2) the Records kept by him of cases treated in the Gynecological Section of the University Class of Clinical Medicine in the Buchanan Ward of the Royal Infirmary, and (3) the Final Examination in Medicine for the Degree of M.B. The Scholar is required to act as non-resident Clinical Clerk in the University Gynecological Ward, and to give assistance in the Examination of Class Exercises. *See* Deed of Foundation, p. 707 of CALENDAR for 1894-95.

1891. W. M. Cairns, M.B., C.M.
1892. John L. Dick, M.B., C.M.
1893. William Edward Fothergill. M.B., C.M.
1894. *Robert William Beesley, M.B., C.M.*

XVI.—THE JAMES SCOTT SCHOLARSHIP.

This Scholarship, founded by Mrs Mary Ann Scott or Thomson of Hawick, of the value of £42, 10s., is awarded annually at the Graduation Ceremonial in Medicine in August for proficiency in Midwifery. The award is based upon the results of the Competitive Examinations in the Class of Midwifery, upon the character of the records of Cases of Midwifery attended by the Candidate at the Royal Maternity and Simpson Memorial Hospital, and upon the position obtained by him at the Final Examination for Degrees in Medicine. The Scholarship is for one year, but may, in special circumstances, be continued for another year. *See* Deed of Foundation, p. 410, CALENDAR, 1883-84.

1891. Robert Cran, M.B., C.M.
1892. Charles Cromhall Easterbrook (M.A.), M.B., C.M.
1893. Alexander Maitland Easterbrook, M.B., C.M.
1894 *William Anderson Stephen, M.A., M.B., C.M.*

XVII., XVIII.—HOPE PRIZE SCHOLARSHIPS.

Two Hope Prize Scholarships in Chemistry, each of the annual value of about £30. For particulars, *see* under Scholarships in Science.

XIX.—THE MOUAT SCHOLARSHIP IN THE PRACTICE OF PHYSICS.

This Scholarship, which will consist of the annual proceeds of about £1500 given by Frederick John Mouat, M.D., of the Local Government Board, London, formerly Professor of Medical Jurisprudence in the University of Calcutta, has been founded in connection with the class of Practice of Physic, but is not to be open for competition until the death of two liferenters.

XX.—MACKAY SMITH SCHOLARSHIP IN CHEMISTRY.

This Scholarship is of the annual value of £25, tenable for two years, and is open for competition to Students who have attended the Class of Chemistry in this University. The successful Candidate is bound to attend the Class of Chemistry, or to prosecute the study of Chemistry in the University during at least one year of his tenure of the Scholarship, in such way as the Senatus Academicus may direct or approve. The next Examination will take place in March 1896.

1892. J. W. Horne, M.A. | 1894. *George Thomson*

XXI.-XXIV.—CRICHTON SCHOLARSHIPS FOR RESEARCH.

Four Scholarships, each of the value of £50, tenable for one year, with power of re-appointment for a second and for a third year, are open in rotation in the subjects of Anatomy, Physiology, Materia Medica, and Pathology, for the prosecution of Research by Graduates who have been Students of this University for not less than four years. The Scholarships in Anatomy and Physiology will be open in October 1895. Candidates are required to submit a sufficient description of the work they propose to undertake to the Dean of the Faculty of Medicine on or before 1st September. The Examination is both written and practical, bearing on Research Work. See Regulations, page 750 of CALENDAR for 1895-96.

III.—BURSARIES.

No of Foundation.	Year of Found.	Name of Founder.	Total Annual Income.	No. of Bursars.	For Years.	Annual Allowance to each Bursar.	Patrons.
I.	1864	Dr Abercrombie, Cape Town.	£20 0 0	1	4	£20 0 0	Governors of George Heriot's Trust.
II.	1871	Dr J. R. Sibbald's Trustees.	About £150 0 0	5	3	30 0 0	Trustees of Dr J. R. Sibbald.
III.	1873	Dr Mackie's Trustees.	60 0 0	2	2	30 0 0	Professors of Fac. of Med. in Univ., Edin.
IV.	1873	Mr Grierson of Ogscastle's Trustees.	80 0 0	4	3	20 0 0	Senatus.
V.	1878	Dr Andrew Thomson	200 0 0	8	4	25 0 0	Trus. of Dr Thomson.
VI.	1878	William Mackenzie	42 10 0	2	1	20 0 0	Senatus.
VII.	1878	John Aitken Carlyle	56 0 0	2	1	28 0 0	Senatus.
VIII.	1882	Mrs Ronald of Liverpool	80 0 0	2		About 40 0 0	Senatus.
IX.	16—	George Heriot. Remodelled 1887	480 0 0 About	6	4	30 0 0	Governors of George Heriot's Trust.
X.	1890	Major Robert Orr Crichton of Lynn, M.D.	500 0 0	10	4	50 0 0	Senatus Academicus.
XI.	1809	Dr Donald Grant, London.	80 0 0 About	2	4	90 0 0 About	Dr Grant's Trustees.
XII.	1846	John Jamieson, Edinburgh.	26 0 0	1	4	26 0 0	Principal and Two Professors.
XIII.	1883	Wm. Renton, Edinburgh.	19 19 6	1	1	19 19 6	Professors of Mathematics, Natural Philosophy, Chemistry, and Political Economy.
XIV.	1886	Richard Allan, Feuar, Kelso.	90 0 0	3	3	About 30 0 0	Trustees of R. Allan.
XV.	1889	Daniel Maclaurin, London.	70 0 0	1	4	70 0 0	Town Council.

I. *Abercrombie Bursary*—Open by competition, in the event of more than on candidate coming forward, to Students who have been brought up in Heriot' Hospital, and have finished their course as Heriot Bursars, to aid them in furthe prosecution of their studies for any of the learned professions. Students in th Faculty of Medicine to be always preferred. Candidates are referred to th Treasurer of the Heriot Trust, 20 York Place, Edinburgh, before 15th Septembe

II. *Sibbald Bursaries.*—These Bursaries, each tenable for three years, ar available to Students in the Faculty of Arts, Medicine, Law, or Divinity entering the University who have not previously attended any University in th United Kingdom or elsewhere, *and who do not hold any other Bursary o Scholarship*, but no objection to a Candidate that he has, during the previou Summer Session, attended any of the Classes in the University of Edinburg required by the Faculties of Medicine or Law. The examination is the same a

the Preliminary and Bursary Examination in the Faculty of Arts at the commencement of each Winter Session. Application to be made to Messrs Mackenzie, Innes & Logan, W.S., 23 Queen Street, Edinburgh, before 15th September.

III. *Mackie Bursaries.*—These Bursaries are awarded to Students of Medicine of the University, one of which is open to Students who have completed their First Annus Medicus, and the other to Students who have completed their Second Annus Medicus, and who are, in the opinion of the Faculty of Medicine, in such pecuniary circumstances as to require assistance. In the event of no appointment having been made to either Bursary on any occasion when it is vacant, the Senatus may, on the recommendation of the Faculty of Medicine, appoint any Candidate to the vacant Bursary who has completed either his first or his second *Annus Medicus* and who otherwise satisfies the requirements of tenure. *Bursars*—1894, *G. H. W. Robertson, M.A.; James R. Anderson* (for one year).

IV. *Grierson Bursaries.*—Candidates from the parishes of Crawford or Leadhills, about to commence their Medical Curriculum, who have passed in the University of Edinburgh a satisfactory examination in the preliminary subjects required by Article I. of the Ordinances for Graduation in Medicine, who have been diligent students, and who require pecuniary aid to enable them to pursue their studies, have a preference. In the case of more candidates than one, the Bursary will be awarded to the best qualified, on examination in the subjects above referred to.

Failing the appointment of preferential candidates, the Bursary will be tenable for periods of one year only, during four successive years, in manner following, viz.:—The 1st year Bursary will be awarded to the student who has taken the highest place in the whole subjects required by Ordinance for the preliminary examination which has to be passed before the first professional examination, provided (1) that he has not already passed the said preliminary examination; (2) that at the date of the examination he has not completed his twenty-first year; and (3) that, in the event of his having passed an equivalent examination and presenting himself for the Medical Preliminary Examination, he shall waive all right to admission to the Faculty of Medicine except through the ordinary Medical Preliminary Examinations of this University, which have to be passed before the First Professional Examination. The 2d year Bursary will be awarded by competitive examination to the student commencing the Second Winter Session, who having already passed the subjects of the Preliminary Examination required for Graduation in Medicine, shall pass the best examination in the subjects of Chemistry, Botany, and Natural History. The 3d year Bursary will be awarded by competitive examination to the student commencing the Third Winter Session who, having already passed the First Professional Examination, shall pass the best examination in the subjects of Anatomy and Physiology. The 4th year Bursary will be awarded by competitive examination in the subjects of Materia Medica and Pathology. *Bursars*—1894, *first year, Yoshinobu Fukuda; second year*, no award; *third year, John Malcolm; fourth year, James Kirk.*

V. One *Thomson Bursary* is awarded at each of the Preliminary Examinations held in Spring and Autumn, to the Candidate who, being about to commence his

Curriculum, takes the highest place in a sufficient number of subjects to enable him to appear for Professional Examination: provided (1) that he has not already passed the said Preliminary Examination; and (2) that, in the event of his having passed an equivalent examination and presenting himself for the Medical Preliminary Examination, he shall waive all right to admission to the Faculty of Medicine except through the ordinary Medical Preliminary Examinations of this University which have to be passed before the First Professional Examination. Students of the name of Thomson or Traquair, or those who are natives of the town or county of Dumfries, or of the city of Edinburgh, have a preference. Candidates claiming a preference must intimate their names to Messrs Traquair, Dickson & Maclaren, W.S., 11 Hill Street, Edinburgh, the agents for the Trust (from whom further particulars may be obtained), before 15th September 1895 and 21st March 1894 for the Examinations in Autumn and Spring respectively. *Bursars*—1894-95, *John G. Jack; Gavin Grey, M.A.*

VI. *Mackenzie Bursaries*, open to Students in the Junior and Senior Anatomy Classes, who shall display the greatest industry and skill in Practical Anatomy, awarded at the end of each Session. *See* CALENDAR for 1879-80, p. 353. *Bursars*—1895, Senior, *J. T. P. Heatley* and *Henry Wade*—equal; Junior, *F. A. Barnardo* and *F. J. Gray*—equal.

VII. *John Aitken Carlyle Bursaries*, one open to Students of the first year, awarded after examination in Anatomy and Chemistry, the other to Students of the second year, awarded after examination in Anatomy and Physiology. *See* CALENDAR for 1879-80, p. 350. *Bursars*—1895, Senior, not awarded; Junior, *T. A. Djedjizian.*

VIII. The *Anderson Bursaries* have been founded by Mrs Ronald of Liverpool, and will come into operation on the death of an annuitant. For Deed of Foundation, *see* CALENDAR 1882-83, p. 396.

IX. The *Heriot Bursaries* are for Students unconnected with the Hospital, entering upon a regular Curriculum with a view to graduation. For remodelled scheme, see CALENDAR, 1887-88, p. 498. For subjects of Examination, &c., see under Bursaries open in Faculty of Arts.

X. *Crichton Bursaries.*—Two of these Bursaries are open annually—one in Autumn and one in Spring—to Students entering the Faculty of Medicine of this University. The subjects of Examination are Latin, Greek, French, German, Mathematics, Logic, and Moral Philosophy. Each Bursary is of the annual value of £50, tenable for four years, provided the Bursars continue Students of the Medical Faculty of this University. *See* Excerpt from Deed, p. 540 of CALENDAR for 1891-92, and Regulations, p. 749 of CALENDAR, for 1895-96.

XI. The *Grant Mortification* is for Students of the University of Edinburgh, of the name of Grant. The holders may attend the Arts, Medical, Divinity, or Law Classes. Application for information may be made to Messrs Mackenzie, Innes & Logan, W.S., 23 Queen Street, Edinburgh.

XII. The *Jamieson Bursary* is for the benefit of the sons of schoolmasters, farmers, mechanics, and labourers, and other persons born and residing within any

one of the following parishes—viz., Crawfordjohn, Crawford, united parishes of Lamington and Wandell, united parishes of Wiston and Roberton, Culter and Biggar. The Bursar may attend Classes in any of the Faculties.

XIII. The *Renton Bursary*, founded by the late William Renton, 20 Royal Terrace, Edinburgh, is for a Student pursuing his studies in the classes of Natural Philosophy, Mathematics, Chemistry, and Political Economy, or such of them as he may consider proper, and who may require assistance. The Bursary is tenable for one year, and cannot be held by any one under the age of sixteen or above twenty-one. It is filled up annually in October.

XIV. *Allan Bursaries.*—These Bursaries are available to Students attending classes in any of the Faculties of Arts, Science, Medicine, or Law, in the University of Edinburgh, and are tenable for three years or for such part of that period as the Bursar shall remain a Student at the University. In nominating Candidates for presentation to the Bursaries, care will be given to prefer such as have been born in the parish of Kelso, provided they are qualified by their previous education for entering the University. Apply to P. Stormonth Darling, Esq., writer, Kelso.

XV. *Maclaurin Bursary.* This Bursary, tenable for four years, is by the will of the founder to be called the "Maclaurin Bursary," and is restricted to Students of the Founder's name of Maclaurin (or in Gaelic orthography "Maclalhrin"). It may be held in any of the Faculties. *See* Deed of Foundation, p. 544 of CALENDAR for 1890-91.

IV.—PRIZES.

I.—NEIL ARNOTT PRIZE FOR EXPERIMENTAL PHYSICS.

This Prize, of the value of about £42, presented to the University by Dr Neil Arnott of London, is awarded annually in October to the Candidate who shall pass with the greatest distinction the Ordinary Examination in Natural Philosophy for the Degree of M.A. Candidates must have been Students of Medicine of this University during either a summer or a winter session; and the successful candidate must continue a Student of Medicine at this University during the next Winter Session, failing which, the prize will be forfeited and assigned to the competitor next in merit. No student can appear for examination after the completion of his third *annus medicus;* and no candidate shall be allowed to offer himself more than once.

In the event of a competitor, qualified as above, not coming forward, the prize will be awarded to a Candidate for a Degree in Arts who shall pass with most distinction the ordinary examination in Natural Philosophy. *See* Deed of Foundation at p. 274 of CALENDAR for 1870-71.

1891. D. Landsborough, M.A.
1892. William F. Harvey
1893. John Malcolm
1894. *J. A. Macdonald*

II.—HOPE CHEMISTRY PRIZE.

(*Now Two Hope Prize Scholarships.*)

This prize was founded by the late Professor Thomas C. Hope in 1844, for the promotion of the Study and Science of Chemistry in the University, in such manner as the Principal and Professors might appoint. It was competed for biennially, at a special examination open to all Students of the University who have worked for eight months, or for two Summer Sessions, in the Chemical Laboratory of the University, and who are not more than twenty-five years of age. The examination was in Chemistry, and was conducted by the Professor of Chemistry, in conjunction with two Examiners appointed by the Senatus. The examination was practical as well as written. The successful Candidate was required to spend the succeeding academical year in working in a Laboratory or Laboratories, under conditions approved by the Senatus, and to receive £100 in such sums, and at such intervals, as might be appointed by them.

No person could hold the Hope Chemistry Prize more than once.

1891. John Shields, D.Sc.
1893. William White Taylor, M.A.

III.—THE ROBERT WILSON MEMORIAL PRIZE.

This Prize was founded by John Wilson of South Bantaskine, in memory of his son, Robert Wilson, and is of the value of £8, 16s. 2d. It is annually awarded at the close of the Winter Session to the student in the senior Chemistry Class who takes the highest honours. *See* Deed of Foundation at p. 351 of CALENDAR for 1876-77.

1892. John W. Paterson
1893. William Hamilton
1894. Andrew Hunter
1895.

IV.—THE ELLIS PRIZE FOR PHYSIOLOGY.

This Prize consists of the proceeds of a sum of £500 bequeathed by the late Daniel Ellis, Esq., to the Principal and Faculty of Medicine of the University of Edinburgh, accumulated for three or five years. Value about £25 per annum. It is awarded for the best Essay or Treatise on some subject of Animal or Vegetable Physiology proposed by the Faculty for competition to Students or Graduates of not more than five years' standing. The next award may be made in 1896. Subject—"The Functions of Wood." Essays in Competition to be lodged with the Dean of the Faculty of Medicine on or before 30th April 1896.

V.—PRIZES FOR THESES.

Gold Medals, each of the value of £10, are awarded annually on the day of graduation to Doctors of Medicine whose Theses are deemed worthy of that honour.

VI.—THE GOODSIR MEMORIAL PRIZE.

This Prize was founded in 1872 by the subscribers to the fund for a memorial of the late Professor John Goodsir. It is in the patronage of the Principal, Dean of the Faculty of Medicine, and Presidents of the Royal Colleges of Physicians and Surgeons of Edinburgh, and is for the encouragement of the study of Anatomy and Physiology. It is given triennially, and is of the value of £60. It is open to all Graduates in Medicine of the University of not more than three years' standing at the time of the competition, and to Licentiates of the Colleges of Physicians or Surgeons of Edinburgh of a like standing, who have attended within the University the same number of classes as are required for the Degree of M.B. The Prize is awarded for the best Essay containing results of original investigations in Anatomy, Human and Comparative, either Normal, or Pathological, or in Experimental Physiology.

The next award may be made in August 1898, and competing Dissertations must be lodged with the Professor of Anatomy not later than the 30th April previously. *See* Deed of Foundation at p. 314 of CALENDAR for 1872-73.

1892. { George Neil Stewart, D.Sc., M.D. / Arthur John Whiting, M.D. } equal.

VII.—THE WIGHTMAN PRIZE IN CLINICAL MEDICINE.

This Prize of £12 was founded by Mrs E. Wightman, in memory of her son, J. T. Wightman, M.B., C.M., and is annually awarded at the close of the Summer Session to the student attending the Class of Clinical Medicine for the best Dissertation on any subject presented by the Faculty of Medicine, or for the best Report and Commentary on cases which have during the previous Winter and Summer Sessions been treated in the University Clinical Wards in the Royal Infirmary. Three months' notice of subject is given by the Faculty of Medicine. *See* Deed of Foundation at p. 348 of CALENDAR for 1876-77.

The Prize, which is open to members of the Clinical Class of either Winter 1895-96 or Summer 1896, will be awarded for the best report and commentary on cases. The Essays to be given in on 6th July.

1890. Not awarded
1891. Douglas C. Watson
1892. D. A. Welsh, M.A.
1893. James Pearse, M.B., C.M.
1894. *Keith Waldegrave Monsarrat, M.B., C.M.*

VIII.—THE BEANEY PRIZE.

This Prize of £37, 10s. was founded in 1878 by James George Beaney, Esq. of Melbourne. It is awarded at the Graduation Ceremonial in Medicine to the Graduate in Medicine and Surgery of the year who, having attended within the University courses on Anatomy, Surgery, and

Clinical Surgery qualifying for Graduation, obtains the highest number of marks during his examinations in these subjects for the Degrees of Bachelor of Medicine and Master in Surgery. The Senatus has the power of withholding the Prize in the event of no Student passing the above examinations with sufficient merit. *See* Deed of Foundation at p. 371 of CALENDAR for 1878-9.

1891 { Harry Rainy, M.A., M.B., C.M. / G. Hennan, M.B., C.M. } equal.

1892. Alex. Brownlie, M.B., C.M.
1893. Hugh Walker, M.B., C.M.
1894. *Jas. Purves Stewart, M.A., M.B., C.M.*

IX.—THE CAMERON PRIZE.

This Prize was founded in 1878 by the late Dr Andrew Robertson Cameron, of Richmond, New South Wales. It consisted of the annual proceeds of a sum of £2000, to be given annually "to the practitioner or member of the medical profession who shall be adjudged to have made the most valuable addition to Practical Therapeutics during the year preceding, and in determining such question, the word Therapeutics shall be taken in its widest sense as including every agent, or agency capable of influencing the human body in the maintenance or improvement of health, avoidance or cure of diseases, or the alleviation of suffering."

The regulations have been remodelled by the Educational Endowments (Scotland) Commission, and the annual proceeds, which, after defraying the necessary expenses, amount to about £80, may be awarded annually to a person who in the course of the five years immediately preceding has made any highly important and valuable addition to Practical Therapeutics. The Prizeman is required to deliver a lecture or course of lectures on the addition to Practical Therapeutics so made by him, or to publish an account of such addition in such manner as the Senatus may prescribe. The prize will not be awarded if, in the opinion of the Senatus, no addition to Practical Therapeutics has been made within the said period of five years of sufficient importance and value to justify the awarding of the prize. The prize is awarded annually at the Graduation Ceremonial in August. *See* Remodelled Regulations, p. 497 of CALENDAR for 1888-89.

1891. David Ferrier, M.D., F.R.S.
1892. No award.
1893. Victor A. H. Horsley, M.B., F.R.S.
1894. Not awarded.

X.—THE DOBBIE SMITH PRIZE IN BOTANY.

This prize, which consists of a Gold Medal, is open to competition each alternate year to all Matriculated Students of the year of the award, for an Essay on a Botanical subject. The subject of the next competition is an original investigation "On the Structure, Development, and

Life History of any British Flowering Plant;" and the memoir is to be accompanied with a series of illustrative specimens. Competing Essays to be sent to the Dean of the Faculty of Medicine on or before the 1st of July 1897. The prize will be awarded to the successful competitor at the Graduation Ceremony of August 1897.

1889. Gustav Mann | 1891. No award
1893. Thomas Duncanson Sadler.

XI.-XXI.—THE GUNNING VICTORIA JUBILEE PRIZES.[1]

Dr Gunning, of Edinburgh and Rio de Janeiro, has founded Eleven Post-Graduation Prizes of the value of £50 each, and each recurring triennially, viz.:—(1) The Monro prize for Anatomy; (2) The Bell prize for Physiology; (3) The Edward Forbes prize for Zoology, &c.; (4) The Hutton Balfour prize for Botany; (5) The Joseph Black prize for Chemistry; (6) The Christison prize for Materia Medica; (7) The Lister prize for Surgery; (8) The Gregory prize for Practice of Physic; (9) The John Thomson prize for Pathology; (10) The Simpson prize for Obstetrics; (11) The Alison prize for Medical Jurisprudence and Public Health. Candidates must be either Bachelors of Medicine or Bachelors of Science of this University of not more than three years' standing. The prizes will be awarded with the approval of the Senatus for (1st) either (*a*) Competitive Essays written specially for the prizes, or (*b*) Theses submitted for Graduation; or (2nd) for original research conducted under supervision of the Professor in the department in which the prize is awarded. The prizes in Anatomy and Chemistry will be awarded in 1896; in Physiology, Botany, Surgery, and Pathology in 1897; in Zoology, Materia Medica, Obstetrics, Public Health, and Medical Jurisprudence, will be awarded in 1898. Competitive Essays are required to be lodged with the Dean of the Faculty of Medicine on or before 30th April of the year in which each prize is to be awarded, and the successful competitors will be announced annually at the Graduation Ceremonial in Medicine.

1892. Gregg Wilson, M.A., B.Sc. (Zoology)
,, Alexander Houston, M.D. (Medical Jurisprudence and Public Health)
1893. Robert Main Horne, M.B., C.M. (Physic)
,, Theodore Rettie, B.Sc. (Chemistry)
1894. *Gustav Mann, M.D.* (Physiology)
,, *Robert Craig Dun, M.B., C.M.* (Pathology)
,, *R. J. A. Berry, M.D.* (Surgery)
,, No award in Botany

[1] The Subjects and order of the awards may be altered before next competition. The Prize in Practice of Physic may be open in 1897.

XXII.—ANDERSON HENRY PRIZE.

The Prize was founded by Isaac Anderson Henry of Woodend, and consists of the proceeds of a sum of £300 accumulated for three years. It is awarded for the best and approved essay on a botanical subject proposed by the Professor of Botany, the Curator of the Royal Botanic Garden, and the President of the Botanical Society of Edinburgh, for competition to students in the Class of Botany in the University of Edinburgh, during any of the three years preceding the date of the award. The next award may be made in August 1898. Competing Essays to be sent to the Dean of the Faculty of Medicine on or before 1st July 1898.

1894. Not awarded.

XXIII.—MILNER FOTHERGILL MEDAL IN THERAPEUTICS.

This Medal, of the value of about £20, is awarded biennially. It is open for competition to Graduates in Medicine of the University, who have been members of the Class of Materia Medica in the University, for the best essay which shall include a description of original research made by the Candidate on a Pharmacological or Therapeutic subject, preference being given to a subject relating to Dietetics. *See* Deed of Foundation, p. 542 of CALENDAR for 1891-92. The first award may be made at the Graduation Ceremonial in August 1897. Essays to be lodged with the Professor of Materia Medica on or before 30th April 1897.

1893. William George Aitchison Robertson, M.D., D.Sc.

FELLOWSHIPS, SCHOLARSHIPS, BURSARIES, AND PRIZES OPEN TO COMPETITION IN THE FACULTY OF MEDICINE IN 1895-96.[1]

For further information, and for information regarding other Scholarships, Fellowships, Bursaries, and Prizes, see above, where full information regarding the conditions of tenure and the values are given.

FELLOWSHIPS.

1. *The Leckie-Mactier Fellowship* (No. II., p. 717). The examination will be held on the 18th, 19th, and 20th November.

2. *The Freeland Barbour Fellowship* (No. III., p. 717). The next award may be made in July 1896.

SCHOLARSHIPS.

The Vans Dunlop Scholarships, each of the value of £100, and tenable for three years. Not more than one of these Scholarships shall be held by the same person at one time.

[1] *N.B.*—The values of the Fellowships, Scholarships, Bursaries, and Prizes are subject to variation consequent on the rise or fall of the rate of interest, &c.

1. *One* will be awarded for Preliminary Subjects (No. V., p. 714). The award may be made in March 1896.

The new arrangements for the other Vans Dunlop Scholarships will be afterwards announced.

2. *The Stark Scholarship in Clinical Medicine* (No. XIV., p. 721). The Competition will take place in July 1896.

3. *The Murchison Memorial Scholarship* (No. XIII., p. 721). The competition in 1896 will take place in London.

4. *The Buchanan Scholarship* (No. XV., p. 722).

5. *The James Scott Scholarship* (No. XVI., p. 722).

6. *The Ettles Scholarship in Medicine* (No. I., p. 718).

7, 8. *Two Hope Prize Scholarships* (No. XVII., p. 723).

9, 10. *Two Crichton Scholarships for Research* will be offered in October to Candidates who have been Students of this University for not less than four years—one in Anatomy and one in Physiology—each of the value of £100, and tenable for one year, with power of re-appointment for a second and for a third year. Candidates are required to intimate their names, and to give a sufficient description of the Research work they propose to undertake, to the Dean of the Faculty of Medicine on or before 1st September. The Examinations are both written and practical. The date of the Examinations will be afterwards announced. (No. XXI., page 723.)

11. *Mackay Smith Scholarship in Chemistry* (No. XX., p. 723).

BURSARIES.

1. *One Sibbald Bursary* (No. II., p. 724).

2-7. *Six Heriot Bursaries* (No. IX., pp. 724, 726).

8, 9. *Two Thomson Bursaries* (No. V., pp. 724, 725).

10-13. *Four Grierson Bursaries* (No. IV., pp. 724, 725). *One* for subjects of the Preliminary Examination; *one* in Chemistry, Botany, and Natural History; *one* in Anatomy and Physiology; *one* in Materia Medica and Pathology. The competition for the Second, Third, and Fourth year Bursaries will begin on 8th October. Names of Candidates to be entered for the First year Bursary on or before 20th September, and names to be entered and Certificates shown for the Second, Third, and Fourth year Bursaries on or before 2nd October.

14, 15. *Two John Aitken Carlyle Bursaries* (No. VII., pp. 724, 726).

16, 17. *Two Mackenzie Bursaries* (No. VI., pp. 724, 726).

18. *Renton Bursary* (No. XIII., pp. 724, 727).

19. *One Mackie Bursary* (No. III., pp. 724, 727). An award may be made for one year at the commencement of the Winter Session, 1895-6. Applications to be made to the Dean of the Faculty of Medicine on or before the 1st October 1895.

20, 21. *Two Crichton Bursaries* (No. X., pp. 724, 726).

Competitors for the above Fellowships, Scholarships, and Bursaries, excepting those awarded for the subjects of Preliminary Examination, must have studied the subjects of Examination at the University of Edinburgh. No Fellowship, Scholarship, or Bursary, with the exception of the Ettles Scholarship, can be held along with any other Fellowship, Scholarship, or Bursary.

PRIZES.

The Medical Faculty Medals.—Gold Medals are given on the day of Graduation to Doctors of Medicine whose Theses are deemed worthy of that honour.

1. *The Neil Arnott Prize* (No. I., p. 727).

2. *The Beaney Prize* (No. VIII., p. 729).

3. *The Cameron Prize* (No. IX., p. 730).

4, 5. *The Gunning Victoria Jubilee Prizes in Anatomy and Chemistry* (No. XI., p. 731). Competitive Essays to be lodged with the Dean of the Faculty of Medicine on or before 30th April 1896.

6. *The Wightman Prize in Clinical Medicine* (No. VII., p. 729). The Essays to be given in on or before 6th July.

7. *The Lord Rector's Prize* (No. 1, p. 361).

8. *Two Gray Prizes* (Nos. 7 and 8, p. 362).

9. *The Ellis Prize in Physiology* (No. IV., p. 728).

WILLIAM DICKSON TRAVELLING FUND.

The William Dickson Travelling Fund. See page 358.

N.B.—*Scholars, Bursars, or Fellows must apply to the Dean of the Faculty of Medicine for Certificates to entitle them to draw the instalments due, and to the Factor for payment thereof, within three months after they have become payable, otherwise they will be regarded as having resigned. Any who desire to resign must at once announce this to the Dean and to the Factor.*

THOMAS R. FRASER, M.D.,
Dean of the Faculty of Medicine and Professor of Materia Medica.

VI.

FACULTY OF MUSIC.

1895-96.

Dean.

PROFESSOR NIECKS,

22 *Dick Place.*

Faculty of Music.

STUDENTS who do not intend to graduate in Music may, without matriculating or passing any Preliminary Examination, attend any or all of the Classes in the Faculty on payment of the Five Shillings University Entrance-Fee, and of the Class Fees.

Students who desire to graduate in Music must pass the Preliminary Examination, and must Matriculate before enrolling in any Class in the Faculty.

The Classes are open both to men and women, and will meet as undernoted, except during the Christmas Vacation, *i.e.*, from Monday, 23rd December 1895, to Monday, 6th January 1896, both days included.

Programme of Classes.

WINTER SESSION, 1895-96.

MUSIC.

PROFESSOR NIECKS.

The following Courses of Lectures, Theoretical and Practical Instruction, and Concerts, will be given in the Winter Session of 1895-96 :—

1. HISTORY OF MUSIC, ESPECIALLY OF THE LAST TWO CENTURIES.

This Class will meet once a week (Thursdays, 3-4), beginning on 24th of October. Twenty Lectures. Fee, One Guinea.

Lecture I.—Music in the Middle Ages.

Lecture II.—Music in the time of the Renaissance.

Lecture III.—Music in the 17th Century.

Lectures IV.-XX.—Music in the 18th and 19th Centuries.

2. Musical Analysis.

This Class meets once a week (Mondays, 3-4), beginning on 21st October. Twenty Lectures. Fee, One Guinea.

The Lives and Works of Beethoven, Schubert, Chopin, and Wagner.

3. Harmony, Melody, and Rhythm.

This Class will meet twice a week (Tuesdays and Fridays, 3-4), beginning on 22nd October. Fee, Two Guineas.

4. Advanced Harmony, Melody, and Rhythm.

This Class will meet twice a week (Tuesdays and Fridays, 4-5), beginning on 22nd October. Fee, Two Guineas.

5. Counterpoint and Composition.

This Class will meet once a week (Mondays, 4-5), beginning on 21st October. Fee, Two Guineas.

6. A Series of Historical Concerts.

Fee for these Concerts, Half-a-Guinea. Those attending any of the Music Classes will have the privilege of free admission.

MATRICULATION FEES.

For the Academical Year, 1st October to 1st October, . £1 1 0
For the Summer Session only, 1st May to 1st October, . 0 10 6

Candidates for Examination or for Graduation must be Matriculated Students of the year in which they appear for Examination or for Graduation.

MUSIC CLASS-ROOM LIBRARY.

The Reading Room of this Library is open for the consultation and study of musical works and books on music to those attending the Music Classes, daily, except Saturday, from Two to Five o'clock.

MUSEUM.

The Museum of Musical and Acoustic Instruments is open to Music Students.

Regulations for Graduation in Music.

I. Two degrees in Music may be conferred by the University of Edinburgh, viz., Bachelor of Music (Mus. Bac.), and Doctor of Music (Mus. Doc.).

I. Preliminary Examination.

II. 1. Every candidate for the degree of Bachelor of Music must pass a preliminary examination in the following subjects :—(1) English, including Geography and British History ; (2) Elementary Mathematics or Elementary Physics or Logic ; (3) any two of the following languages, viz., Latin, Greek, French, German, and Italian, but one at least must be a modern language.

2. The extent and standard of the preliminary examination is determined by the Senatus Academicus.

3. A degree in Arts not being a degree *honoris causâ tantum*, in any of the Universities of the United Kingdom, or in any Colonial or Foreign University, specially recognised for the purpose by the University Court after consultation with the Senatus, exempts from the preliminary examination ; and the Senatus has power to determine what examinations, other than those for the degree hereinbefore mentioned, will be accepted either in whole or in part in place of the preliminary examination.

II. Bachelor of Music.

University Attendance.

III. Candidates for the degree of Bachelor of Music must attend, in the University of Edinburgh during a whole Winter Session, a course or courses of instruction extending in all to not less than eighty Lectures, and including a course on the History of Music.

III. First Professional Examination.

IV. There is a First Professional Examination in Music in the following subjects :—

(1) Singing or performing upon some Musical Instrument.
(2) Reading at Sight.
(3) Elements of Music, including Musical Modes, and Scales, Notation, Measure, and *Tempo*.
(4) Harmony in not more than four parts.
(5) Elementary Counterpoint.
(6) Form: Sonata, Rondo, Fugue, and Minor Structures.
(7) Outlines of the History of Music.

The Ear Test will be applied to every candidate.

IV. Second Professional Examination.

V. There shall be, at least one year after the candidate has passed the First Professional Examination, a second Professional Examination in Music and in Literature in the following subjects :—

(1) One of the following languages not already taken in the preliminary examination—
French.
German.
Italian.
(2) Rhetoric and English Literature (including Prose Composition and a knowledge of Metrical Rules).
(3) Harmony in not more than five parts.
(4) Advanced Counterpoint.
(5) Canon in two parts, and Imitation and Fugue in not more than four parts.
(6) Form (Description of Structure and Character of Musical Forms, and Analysis of Musical Works).
(7) Elements of Instrumentation (Compass of the Orchestral Instruments, and of the Organ and Pianoforte).
(8) Critical Knowledge of certain prescribed Scores.
(9) Playing at Sight from easy Vocal and Instrumental Scores, and from Figured Bass.
(10) The History of Music.
(11) Acoustics in so far as connected with the Theory of Music, and Physiology of the Vocal Organs.

In addition each candidate will be required to submit the following exercises composed by himself :—

(*a*) A Solo Song with Pianoforte Accompaniment.
(*b*) A Four-part Vocal Composition.
(*c*) An Instrumental Composition (other than a Dance) for the Pianoforte or Organ, or for any Stringed or Wind Instrument with Pianoforte or Organ Accompaniment.

The extent and standard of the examination in these subjects is fixed from time to time by the Senatus Academicus, and the examination is partly written and partly oral and practical.

V. Examiners.

VI. The examiners for both examinations are (1) the Professor of Music ; (2) an Examiner in Music appointed by the University Court ; (3) Examiners in the literary subjects numbered (1) and (2) of Section V. hereof, appointed by the University Court.

VI. Doctor of Music.

VII. Bachelors of Music of the University of Edinburgh of not less than three years' standing, and not less than twenty-five years of age,

may offer themselves for the degree of Doctor of Music, under the following regulations :—The degree is given in three Departments, and Candidates may present themselves in one or more Departments.

The Departments shall be those of—

(1) Composers.
(2) Executants.
(3) Theorists or Historians.

VIII. (1) Candidates for the degree of Doctor of Music as Composers must submit a prescribed number of Vocal and Instrumental Compositions in the larger forms (such as Oratorio, Opera, Cantata, Symphony, Sonata, Overture). Each work must be the original and unaided composition of the candidate, and must be accompanied by a declaration to that effect signed by the candidate.

(2) Candidates will be examined in the following subjects :—

(*a*) The more recondite Contrapuntal Forms—Fugal Writing in more than four parts, &c.
(*b*) Instrumentation, including certain prescribed books on the subject.
(*c*) The works of the great Composers from Palestrina onwards.

IX. (1) Candidates for the degree of Doctor of Music as Executants will be required to show their special skill in the execution of Solo and *ensemble* works in different styles. The works will be selected partly by the candidates and partly by the examiners.

(2) The candidates will be examined in sight-reading, and must give evidence of their power of playing Orchestral Scores, and will be required to invent Transitions and to modulate from one Key and Piece to another. They will further be required to pass an examination on the History and Literature of their special instrument, and on the method of teaching that instrument.

X. (1) Candidates for the degree of Doctor of Music as Theorists or Historians must present one or more treatises on Theoretical or Historical subjects, which must be the result of research and original thought, not mere abstracts or compilations of existing works. They must be accompanied by a declaration signed by the candidate that they are his own unaided work.

(2) Candidates will also be required to pass an examination (*a*) in the Theory and (*b*) in the History of Music.

The examination will be on a higher standard in the subject which the candidate selects as his specialty.

XI. The examiners for the degree of Doctor of Music are the same as for the degree of Bachelor of Music.

XII. It is competent to the University Court of the University of Edinburgh, after consultation with the Senatus, to modify from time to time the provisions as to curriculum hereinbefore contained, in case such modification shall be rendered desirable.

XIII. (1) The degree of Doctor of Music (Mus. Doc.) may be conferred *honoris causâ tantum*.

(2) The honorary degree of Doctor of Music will not be conferred by the Senatus Academicus on any person unless he has been recommended for the said degree by the Faculty of Music in a reasoned representation, which must have been submitted in writing to the Senatus Academicus by the said Faculty, and must have been considered and approved by the Senatus at a special meeting at which not less than two-thirds of the members were present.

THE HONORARY DEGREE OF DOCTOR OF MUSIC.

17th April 1895.

Professor EBENEZER PROUT, B.A., Mus. Doc., Trinity College, Dublin, was the First to receive the Honorary Degree of Doctor of Music (Mus. Doc.) of this University.

Class Prize Lists.

1894-95.

HISTORY OF MUSIC.

HONOURS CERTIFICATE.—1. Helen Lyon Smith, Dumfries (*Medallist*); 2. Agnes Johnston, Edinburgh; 3. Robert Hutton Malcolm, Edinburgh; 4. William Cochrane, Leith.

HONOURABLE MENTION CERTIFICATE.—5. Margaret Fullarton Kennedy, Edinburgh; 6. Arthur Poyser, Edinburgh; 7. Agnes H. S. Niven, Edinburgh.

MUSICAL ANALYSIS.

HONOURS CERTIFICATE.—1. Christina Struthers, Edinburgh; 2. Helen Lyon Smith, Dumfries (*Medallists*); 3. Agnes Johnston, Edinburgh; 4. May Gibb, Edinburgh; 5. Minnie Millar, Edinburgh; 6. Margaret Fullarton Kennedy; 7. William Cochrane, Leith; 8. Robert Hutton Malcolm, Edinburgh; 9. E. E. G. Dallas, Edinburgh; 10. Janet Jeffrey, Edinburgh; 11. Helena E. M. Guthrie.

HONOURABLE MENTION CERTIFICATE.—12. Arthur Poyser, Edinburgh; 13. Edith Rowe, Edinburgh; 14. Agnes H. S. Niven.

HARMONY, MELODY, AND RHYTHM.

HONOURS CERTIFICATE.—1. E. E. G. Dallas, Edinburgh (*Medallist*); 2. Harriet S. Grant, Leith; 3. Ada B. Macleod, Edinburgh.

ADVANCED HARMONY, MELODY, AND RHYTHM.

HONOURS CERTIFICATE.—1. Helen Lyon Smith, Dumfries (*Medallist*).
HONOURABLE MENTION CERTIFICATE. — 2. Margaret Fullarton Kennedy; 3. Arthur Poyser, Edinburgh; 4. J. A. Y. Stronach, Edinburgh.

COUNTERPOINT AND COMPOSITION.

HONOURS CERTIFICATE.—1. Christina Struthers, Edinburgh (*Medallist*); 2. Helen Lyon Smith, Dumfries.
HONOURABLE MENTION CERTIFICATE.—3. Minnie Millar, Edinburgh; 4. Agnes Johnston, Edinburgh; 5. William Cochrane, Leith; 6. Robert Hutton Malcolm, Edinburgh; 7. Arthur Poyser, Edinburgh; 8. May Gibb, Edinburgh.

FREDERICK NIECKS, *Professor.*

DATES OF ENTERING FOR PRELIMINARY EXAMINATON FOR DEGREES IN MUSIC FOR THE ACADEMIC YEAR (1ST OCTOBER TO 1ST OCTOBER), AND FOR PAYMENT OF FEES.[1]

Each Candidate is required to pay a fee of 10s. 6d. for each appearance at the Preliminary Examination.

The Preliminary Examinations take place in Autumn and Spring.

The Examination in Italian, English, Latin, Greek, Mathematics, French, and German is the same as the Preliminary Examination in Italian, English, Lower Latin, Lower Greek, Lower Mathematics, French, and German for the Degree in Arts; and the Examination in Logic and Physics is of the same standard as the Preliminary Examination in these subjects for Degrees in Medicine. The subjects are denoted in the Time-Table of the Preliminary Examinations for the Degree in Arts by the figure 4.

[1] If names are not entered, and fees are not paid, on or before the stated dates, a late entry-fee of ten shillings must be paid before the Candidate can be admitted to examination.

Candidates who intend to present themselves for Examination must apply at the Matriculation Office, University (Old) Buildings, for schedules, which must be completed and lodged at that office, along with the fees, not later than 20th September 1895 and 18th March 1896 for the autumn and spring Examinations respectively.

Candidates applying for information regarding the Preliminary Examination will be supplied with copies of the Regulations for the Preliminary Examinations for Degrees in Arts and in Medicine, which give the outlines and dates, &c., for the Preliminary Examination for Degrees in Music.

FEES FOR DEGREE EXAMINATIONS.

The Fee for Degree of Mus. Bac. is £10, 10s., divided as follows:—

First Professional Examination	£3	3	0
Second Professional Examination—Literary part .	1	1	0
Do. Do. —Musical part .	3	3	0
For the Diploma	3	3	0

Candidates who fail to pass in one or more of the subjects of examination pay a fee of 10s. 6d. for each subject in which they are re-admitted to examination.

DEGREE EXAMINATIONS.

1896.

March 20. Names to be given in, Certificates shown, and fees paid, on or before this date.

April 1. Singing, or playing an Instrument, Reading at Sight, and Ear Test, at 10; Elements of Music and Harmony, at 2.

„ 2. Counterpoint and Form, at 10; History, at 2.

Candidates who cannot attend personally to pay the fees should transmit them to T. Gilbert, University, Edinburgh, by *Post Office* or *Postal Orders*, or by *Bank Drafts*, crossed Union Bank of Scotland (Hunter Square Branch), Edinburgh,

and not by cheques on private accounts. If names are not entered and Fees paid on or before the stated dates, an additional or late-entry fee of 10s. must be paid before the Candidate can be admitted to Examination. A Candidate is not held to be entered for the Examination until his Schedule is lodged, the Fee paid, and a Pass to the Examination obtained.

FREDERICK NIECKS,
Dean of the Faculty of Music.

BUCHER SCHOLARSHIP.

By the will of Signor Theophile Bucher, his trustees were enjoined to pay over the residue of his estate, amounting to about £4000, to the University, for the purpose of founding one or more Scholarships in Music to be held by any young men born in Scotland, who may shew a natural talent for music and wish to make it their profession, for the purpose of improving their education, and enabling them to prosecute the study of the science and art of Music in Italy, Germany, and France.

The Subjects of Examination for the Scholarship include Harmony, Rhythm, and Counterpoint, and the competition is open to young men between the ages of sixteen and twenty-five inclusively. The value shall not, after deducting the expenses of management and of examination, exceed £120 in any one year, the interest in excess of that sum to be added to the capital to form a second Scholarship. It is tenable for three years, and may be extended to a period not exceeding two years, during which time the scholars must prosecute the study of the science and art of Music in Italy, Germany, and France, as the Senatus, on the recommendation of the Faculty of Music, may determine. The Scholarship may be open in 1896-97. See Scheme of Administration, page 709 of CALENDAR for 1894-95.

New Foundations, &c.

REGULATIONS FOR GEORGE HERIOT'S FELLOWSHIP.

(1) The Fellowship shall be open to any Bachelor of Pure Science of the University of Edinburgh of not more than five years' standing from his Bachelor's Degree, or to any Master of Arts with Honours, of the University of Edinburgh, of not more than five years' standing from his Master's Degree, provided always that the Candidate shall have attended during his curriculum for not less than two years at the University of Edinburgh.

(2) The date of Election on each vacancy shall be determined by the Senatus, and shall be duly advertised, and Candidates shall be invited to send in applications to the Secretary of the Senatus, stating in what manner they propose to fulfil the conditions of tenure laid down in Rule (4) hereafter.

(3) The Fellowship shall be awarded alternately in the following Groups or Departments of Study in the order named:—

(1) Mathematical, Physical, Experimental, and Natural Science, embracing the following subjects:—Mathematics, Natural Philosophy, Astronomy, Botany, Geology, Chemistry, Zoology.

(2) Language and Literature, embracing — Latin, Greek, Modern Greek, English, French, German, Italian, Sanskrit, Hebrew, Arabic, Syriac, Celtic.

(3) Philosophy and History, embracing — Logic and Metaphysics, Moral Philosophy, Political Economy, Education (Theory, History, and Art of), Philosophy of Law, History, Archæology and Art (History of), Constitutional Law and History, Roman Law, Public Law.

The award shall be made by Competitive Examination among the Candidates of the Group. This Competitive Examination shall be con-

ducted by means of Theses composed by the competing Candidates on subjects connected with their special study or branch of research, as announced by them in terms of Rules 2 and 4 hereof, and the said subjects shall be submitted beforehand to the Senatus, and shall be subject to their approval, and the Theses shall be submitted after such interval as the Senatus shall determine.

The examination of the Theses shall be entrusted to Examiners appointed by the University Court after consultation with the Senatus.

The said Examiners shall make a joint report to the Senatus, and the Senatus shall award the Scholarship on the said report, provided always that if they are of opinion that no sufficiently qualified Candidate has appeared in the Group, the award may be withheld, and the Scholarship offered, after due notice of the vacancy in terms of Rule (2), in the next Group of Subjects in the order as above defined.

In the event of equality between Candidates in two different subjects, preference shall be given to the subjects in the order of their occurrence in the above list: provided always that after each occasion on which an award has been made in any particular subject, the name of that subject shall be removed to the bottom of the list in the respective Departments.

(4) During the tenure of his Fellowship the Fellow shall prosecute Research or Higher Special Study in some department of Literature, Philosophy and History, or Pure Science, to be specified by him in his application for the Fellowship.

(5) Payment of the Stipend of the Fellowship shall be made half-yearly in advance. Before receiving any payment after the first the Fellow shall submit to the Dean of the Faculty in which he is a Graduate a written report on the progress of the work in which he is engaged, with a programme of his future work. If this report and programme appear to the Dean, or, if he is in doubt, to the Senatus, to be sufficient, he shall countersign the same and forward them to the Treasurer of the Heriot Trust as warrant for the payment of the Fellow's stipend.

(6) It shall be in the power of the Heriot Governors, if they see fit, in special cases, on receipt of a report from the Senatus recommending such action, to continue the tenure of a Heriot Fellow for such period as they may determine.

(7) It shall be in the power of the Heriot Governors at any time to make such inquiries through the Senatus into the conduct and work of a Heriot Fellow as they may desire, and to suspend or discontinue his Fellowship should they see fit, and also to take like action on any report originating with the Senatus itself.

REGULATIONS FOR THE MACKENZIE (STORNOWAY) BURSARY.

The University Court of the University of Edinburgh, considering that the late Mrs Harriet E. Morison, of Stornoway, by her Trust-Disposition and Settlement dated 26th June 1886, and registered 10th August 1887, bequeathed "to the University of Edinburgh one thousand pounds for founding a bursary for the Students thereof, subject to such conditions and regulations as the Court of the said University may appoint; but with this proviso, that the said Bursary shall be called the 'Mackenzie Bursary,' and that Students of the name of Mackenzie shall have a preference in the selection of Beneficiaries therefor;" and further, considering that at a meeting of the Court held on the 17th day of December 1888, the said Bursary was assigned to the Faculty of Arts of the University, and that the opinion of the Senatus Academicus as to the conditions on which the Bursary ought to be bestowed, has been obtained and considered, Resolve:—

1. That the Bursary founded and endowed in terms of the bequest of the said Mrs Harriet E. Morison shall, for distinction, be called the "Mackenzie (Stornoway) Bursary."

2. The patronage of the Bursary shall belong to the Senatus Academicus; and on each occasion of a vacancy the Bursary shall be open to Students about to enter on their first Session in the Faculty of Arts, and shall be awarded by competitive Examination at the ordinary Bursary Competition held at the commencement of the Winter Session; and the Subjects of Examination shall be the subjects prescribed from time to time for the Examination of Candidates for first Session Bursaries in Arts.

3. Each Preferential Candidate must lodge his application with the Secretary of Senatus at least three weeks before the commencement of the said Annual Bursary Competition.

4. Candidates of the name of Mackenzie shall have a preference in the selection of Beneficiaries; and if, on any occasion, there should be more than one Candidate of that name, the Bursary shall be conferred on the Candidate who obtains the higher place in the Examination; provided always that no person shall be appointed who has not passed in at least two of the Subjects of the Arts Preliminary Examination, one of which must be Latin, Greek, or Mathematics on the Higher Standard.

5. Failing any such qualified Candidate of the name of Mackenzie, the Bursary shall be awarded according to the Rule which for the time regulates the appointment of Candidates for the open Bursaries of the First Year in the Faculty of Arts.

6. The Bursary shall be tenable for four years: provided that the holder shall continue to follow the ordinary Curriculum in Arts during that period, that he shall attend at least two classes in the said Curriculum in each Winter Session during his tenure of the Bursary, and that he shall produce evidence at the end of each Session that he has made reasonable progress in his studies.

7. In the event of any holder of the Bursary completing his Curriculum in the Faculty of Arts within three years, the Senatus Academicus may continue his tenure of the Bursary for another year, if he pursue his studies that year in two or more of the Higher Classes in the Faculty with a view to Graduation with honours.

8. The holder of the Bursary shall be entitled to receive the free income of the Fund for its endowment for each year of his tenure, after payment of all necessary expenses.

9. Should the Bursary fall vacant during the currency of any period of Tenure, it shall be in the power of the Senatus Academicus, either to appoint to the Bursary, for the rest of such period, a student of the same standing as the student who has vacated it, or to declare it open to competition for the full period of tenure under Rule II.

10. The Income of the Fund for any period during which the Bursary may be vacant shall be added to the Capital.

11. If in the opinion of the Senatus Academicus any holder of the Bursary has failed to comply with any of the conditions of tenure contained herein, they shall declare that his tenure has ceased; and in the event of what they consider gross misconduct on the part of any holder of the Bursary, they shall have power to suspend him from, or deprive him of the Bursary: provided that, in either case, their decision shall be subject to an appeal to the University Court, if taken within eight days, but that such decision shall receive interim effect from its date. See Excerpt from Deed, page 521 of CALENDAR for 1889-90.

REGULATIONS FOR CRICHTON BURSARIES AND SCHOLARSHIPS FOR RESEARCH.

A. Crichton Bursaries.

1. That as there are at the disposal of the Senatus for Students entering upon the study of Medicine, ten Bursaries of £50 each, tenable for four years, and as two Bursaries may therefore be annually awarded, it is advisable that, in the meantime, one Bursary be offered for competition at each April and October Preliminary Examination. An annual surplus of £25 would thereby remain, and the Faculty recommend that this should be added to capital until a sufficient sum has accumulated to allow of a third Bursary being offered annually.

B. Crichton Scholarships.

1. That as an annual sum of £250 is now available for the prosecution of Research by Graduates who have been Students of this University for not less than four years, a Scholarship be awarded in rotation in each of the subjects of Anatomy, Physiology, Materia Medica, and Pathology.

2. That the selection of the Scholar shall be by competitive examination on the subject for which the Scholarship is at the time offered; and that the examination shall comprise a written paper and a practical examination directly bearing upon research work in the subject.

3. That two of these Scholarships be offered for competition in October 1895—one in the department of Anatomy, and another in the department of Physiology; and on subsequent occasions, either in the October or April following the date when a Scholarship becomes vacant, the third Scholarship being offered in the subject of Materia Medica, and the fourth in that of Pathology.

4. That the appointment to each Scholarship shall be for one year, with the power of reappointment for a second and for a third year, after consideration by the Faculty of a report by the Professor of the department on the work of the Scholar; this report to be presented to the Faculty at least six weeks before the termination of the Winter Session if the Scholar had been appointed in April, or at least six weeks before the termination of the Summer Session if the Scholar had been appointed in October.

5. Before the final appointment of any Candidate to a Scholarship, a sufficient description of the Research work he proposes to undertake shall be presented to the Faculty of Medicine by the Professor of the Department in which the work is to be carried on, and this report shall be taken into consideration before the Scholar is recommended to the Senatus for appointment.

6. The competitive examination shall be conducted by the Professor of the subject in which the Scholarship is offered for competition along with an expert on the subject; and each examiner shall receive an honorarium of £5, 5s.

7. The Faculty further recommend that the annual available surplus of the £250 per annum for Research Scholarships should be made applicable to the payment of the research expenses of the Scholar, provided that in any year no larger sum than £25 be expended for these expenses in the case of any single Scholar.

8. That a condition of tenure shall be that the Research work is carried on in one of the Departments of the Medical Faculty of the University, to be approved of by the Faculty and Senatus. See Excerpt from Deed, in CALENDAR for 1891-92, page 540.

Benefactors of the University.

THE Revenues of the University were formerly scanty and very inadequate for the encouragement of the higher education and learning in the Scottish metropolis. Scholarships and Fellowships were unknown prior to those recently instituted, and the emoluments of several of the Chairs are still greatly inferior to those in many other Universities.

During the early period of its history, the University received a considerable number of small donations and bequests, chiefly for Bursaries. Notices of these will be found in the preceding pages, in the Histories of the University by Bower, Dalzel, and Grant, and in the Report of the Universities' Commissioners in 1830. A list of early Benefactors to the Library is given at p. 51.

By Act 1 & 2 Vict., cap. 55, the various sums of money mortified in the hands of the Town Council for the support of the University, amounting to £13,119, were discharged, and an annual payment of £2500 (since reduced to £2170), secured upon the revenues of Leith Docks, is assigned to the University for the purposes of these bequests.

Within this century, but especially since 1860, many donations and bequests have been made by Benefactors of the University for the foundation of Fellowships, Scholarships, and Bursaries, for the endowment of Chairs, and for the erection of the New Buildings, including the great "M'Ewan Hall." As the University, however, is still very inadequately endowed, much requires to be done that it may not fall behind the requirements of the age. Intending Benefactors are respectfully reminded that additional CHAIRS, LECTURESHIPS, LABORATORY EQUIPMENTS, LIBRARY ENDOWMENTS, SCHOLARSHIPS, BURSARIES, and FUNDS for RESEARCH, for GENERAL MAINTENANCE, and for BUILDING, are urgently required. The

names of Benefactors, if so desired, may be connected with the Benefactions they bestow. Such Benefactions may simply be conveyed to the "University of Edinburgh." All necessary information will be gladly afforded by the Secretary of the University Court, the Secretary of Senatus, the Registrar, the Deans of the Faculties, or the University Librarian.

The following list includes the chief Benefactors of the present century, together with the purposes of their benefactions [1] :-

(A.)—*Founders of Bursaries in the present Century.*

Rev. J. Stewart, South Carolina—Founder of the Stewart Bursaries.

Sir John M'Pherson, late Governor-General of India—Founder of the M'Pherson Bursary.

Rev. R. Blair, D.D.—Founder of the Blair Bursaries in Arts and Theology.

J. Stewart Hepburn, Esq. of Colquhalzie—Founder of three Theological Bursaries.

John Jamieson, Esq., Edinburgh—Founder of the Jamieson Bursary.

George Parker Bidder, Esq.—Founder of the Jardine Bursary.

William Lennie, Esq., Teacher, Edinburgh—Founder of the Lennie Bursaries.

John Bruce, Esq., Trinity Crescent, Edinburgh—Founder of the Bruce Bursaries.

M'Diarmid Testimonial Trustees—Founders of the M'Diarmid Bursary.

W. Patrick, Esq. of Roughwood—Founder of the Patrick Bursaries.

James Gray, Esq. of Baadpark—Founder of the Gray Bursaries.

Edinburgh Caithness Association—Founders of a Bursary.

Edinburgh Galloway Association—Founders of a Bursary.

Ayrshire Club—Founders of two Bursaries.

Peebles-shire Society—Founders of a Bursary.

Dr Abercrombie, Cape Town—Founder of a Bursary.

Mrs Margt. Tyndall Bruce of Falkland—Founder of Bursaries.

Trustees of Francis J. Scott, Esq. of Mount Lodge, Portobello—Founders of two Bursaries.

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[1] An Association exists for the purpose of promoting—1st, The Foundation of Scholarships and Fellowships for the encouragement of the higher learning among the more advanced Students; 2d, The better Endowment of existing Chairs; 3d, The Foundation of new Professorships; and 4th, Other University objects.

The Chancellor of the University is President of this Association; the Hon. Secretary is Sir Alexander Christison, Bart.; and the Acting Secretary is Robert G. Scott, Esq., W.S., 61 Castle Street, Edinburgh.

Miss HANNAH HARRISON of Lasswade—Founder of a Bursary.

Miss MARY ETTLES of Inverness—Founder of three Bursaries, and the "Ettles Medical Scholarship."

TRUSTEES of the Rev. JOHN SPENCE, Minister of Kinnaird—Founders of two Bursaries.

JOHN ROBERTSON SIBBALD, M.D.—Founder of Five Bursaries.

ARGYLLSHIRE, BUTE, and WESTERN ISLES ASSOCIATIONS—Founders of a Bursary.

SUBSCRIBERS to MEMORIAL to ROBERT STEWART, Esq. of Ardvorlich—Founders of a Bursary.

THE EDINBURGH BORDER COUNTIES ASSOCIATION—Founders of two Bursaries.

THE RIGHT HON. THOMAS, EARL OF ZETLAND—Founder of the Orkney and Zetland Bursary.

TRUSTEES OF JAMES GRIERSON, OF OGSCASTLE—Founders of the Grierson Bursaries.

TRUSTEES OF Dr MACKIE, Leith—Founders of Mackie Bursaries.

TRUSTEES of J. CAIRNS, Esq., W.S.—Founders of the Cairns Bursary.

TRUSTEES OF Mrs JOHNSTONE of Harthope, Moffat—Founders of the Johnstone of Harthope Bursary,

TRUSTEES OF JAMES LAMBERT, Esq., Alloa—Founders of the Lambert Bursary.

ROBERT MARSHALL, Esq., Merchant, Edinburgh—Founder of the Marshall Bursary.

JOHN FOTHRINGHAM, Esq. of Heathpool—Founder of the Fothringham and Forrest Bursaries.

Right Hon. LAWRENCE, EARL OF ZETLAND—Founder of the Zetland Bursaries.

ANDREW THOMSON, M.D.—Founder of Eight Bursaries in Arts, Divinity, Law, and Medicine.

EDINBURGH EAST LOTHIAN ASSOCIATION—Founders of a Bursary in Arts.

EDINBURGH UNIVERSITY ENDOWMENT ASSOCIATION—Founders of Six Bursaries in Arts.

Mrs ISABELLA WEBSTER—Founder of the Webster Bursaries in Divinity.

Dr JOHN AITKEN CARLYLE—Founder of two Bursaries in the Faculty of Medicine.

Mrs ELIZABETH MACKENZIE—Founder of the Mackenzie Bursaries.

Dr JOHN MUIR—Founder of a Classical Bursary.

TRUSTEES OF Mrs BARBARA MACAULAY OR MYLNE—Founders of a Bursary in Divinity.

TRUSTEES OF Rev. JOHN PATTERSON—Founders of a Bursary in Anglo-Saxon Grammar and Literature.

THOMAS CARLYLE—Founder of the John Welsh Bursaries in Mathematics and Classics.

Mrs HELEN ANDERSON or RONALD, Liverpool—Founder of the Anderson Bursaries.

SUBSCRIBERS to Testimonial to W. MACKINNON, Esq. of Balinakill —Founders of the Mackinnon Bursaries.

TRUSTEES of JAMES WHITELAW—Founders of Whitelaw Bursaries.

TRUSTEES of WILLIAM RENTON, Esq.—Founders of a Bursary in Divinity, and one in Arts.

Miss ISABELLA MACDOUGALL, Perth—Founder of the John and Isabella Macdougall Bursaries.

ROBERT HUNTER, Esq., Dalhousie Chesters—Founder of two Bursaries in Divinity.

ROBERT PILLANS NEWTON of Castlandhill and Drumcross—Founder of the Newton Bursaries.

PETER CAMPBELL MANN of Seaham Harbour, Durham—Founder of a Bursary.

CHARLES JARDINE of Thorlieshope—Founder of Bursaries in Arts.

ISAAC ANDERSON HENRY—Founder of the Anderson Henry Prize.

Mrs H. E. MORISON—Founder of the Mackenzie (Stornoway) Bursary.

DANIEL MACLAURIN, Esq.—Founder of the Maclaurin Bursary.

THOMAS LOCKERBY, Esq.—Founder of the Lockerby Bursary.

GEORGE COUSIN, Esq.—Founder of the "Bailie Cousin Bursary."

THOMAS HILL PATTISON, M.D.—Founder of a Bursary in the Faculty of Medicine.

Major ROBERT ORR CRICHTON of Lynn—Founder of the Crichton Bursaries in the Faculty of Medicine.

Rev. THOMAS MAULE—Founder of Maule's Bursaries.

Mrs A. B. R. MILNER FOTHERGILL of Hayton Quarry—Founder of the Milner Fothergill Gold Medal in Therapeutics.

DONALD FRASER, M.D., London, and ASSOCIATION for the BETTER ENDOWMENT of the UNIVERSITY—Founders of the Donald Fraser Bursary in Experimental Physics.

SUBSCRIBERS TO MEMORIAL TO PROFESSOR KELLAND—Founders of Kelland Memorial Prize.

(B.)—*Founders of Scholarships or Fellowships in the present Century.*

THE PITT CLUB—Founders of two Scholarships, one in Arts and one in Divinity.

James Mackenzie, Esq., W.S.—Founder of Mackenzie Scholarship.

Alex. Henry Rhind, Esq. of Sibster—Founder of the Rhind Scholarships and Bursaries.

Sir David Baxter, Bart., of Kilmaron—Founder of the Baxter Scholarships in Arts and Sciences.

Sir William Fettes, Bart.—Founder of the Fettes Exhibitions.

John Maxton, Esq.—Founder of a Divinity Scholarship.

Miss Elizabeth Drummond—Founder of the Drummond Scholarship.

Mrs Margaret Tyndall Bruce—Founder of three Scholarships.

James Guthrie, Esq., of London—Founder of the Guthrie Fellowship.

Subscribers to Hamilton Memorial Fund, and Association for the Better Endowment of the University—Founders of a Philosophical Fellowship.

Association for the Better Endowment of the University—Founders of a Classical Fellowship.

Trustees of Dr J. H. Gilchrist—Founders of three Scholarships for Natives of India.

John Robertson Sibbald, M.D.—Founder of a Medical Scholarship.

Miss Mary Baxter, of Balgavies—Founder of a Scholarship.

Subscribers to Falconer Memorial Fund—Founders of a Fellowship.

Subscribers to Syme Fellowship—Founders of a Fellowship in the Medical Faculty.

Subscribers to Goodsir Memorial.—Founders of a Prize and eventually a Fellowship in the Medical Faculty.

Trustees of Mrs Charles Maclaren—Founders of the Charles Maclaren Scholarship.

Subscribers to Glover Memorial Fund, and Association for the Better Endowment of the University—Founders of the "Glover Divinity Scholarship."

Mrs M. Arnott, Widow of Neil Arnott, M.D.—Founder of the "Neil Arnott Scholarship for Experimental Physics."

John Edward Baxter, Esq. of Craigtay, bequeathed the residue of his estate, out of which three Scholarships named after him have been founded by the University Endowment Association.

The Rev. David Aitken, D.D., formerly Minister of Minto—Founder of the Aitken Scholarship.

David Skirving, Esq., of 13 Westbourne Park, London—Founder of the Skirving Scholarship for Moral Philosophy.

Andrew Thomson, M.D.—Founder of a Scholarship.

Misses Kidd of Woodhouse—Founders of the David Kidd Divinity Scholarship.

Dr R. H. Gunning of Rio Janeiro—Founder of two Scholarships and a Fellowship in the Faculty of Divinity, and of eleven Prizes in the Faculty of Medicine.

Dr T. Leckie—Founder of the Leckie-Mactier Scholarship.

Subscribers to Memorial of Dr Coldstream—Founders of the Coldstream Memorial Medical Missionary Scholarship.

Mrs James Buchanan—Founder of a Scholarship in Midwifery and Gynecology.

Dr Andrew Vans Dunlop, H.E.I.C.—Founder of the Vans Dunlop Scholarships in Arts, Law, and Medicine.

Misses Steven of Bellahouston—Founders of a Scholarship in Agriculture.

Subscribers to Memorial of Dr Charles Murchison—Founders of the "Charles Murchison Scholarship."

Mrs Mary Ann Scott or Thomson of Hawick—Founder of the James Scott Scholarship in Midwifery.

Robert Mackay-Smith, Esq., Edinburgh—Founder of the Mackay-Smith Scholarships in Natural Philosophy and Chemistry.

Dr Frederick John Mouat—Founder of the Mouat Scholarship in Practice of Physic.

Dr John Stark, Auchtermuchty—Founder of the Stark Scholarship in Clinical Medicine.

Mrs Kidd—Founder of "James Fairbairn's Scholarship."

Miss Jane Jeffrey—Founder of the Jeffrey Scholarships.

Dr A. H. Freeland Barbour—Founder of the Freeland Barbour Fellowship.

Miss Matilda Johnston Cobb—Founder of the Cobb Divinity Scholarship.

Mrs Elizabeth Mackie or Trevelyan—Founder of Scholarship in Engineering and Mechanical and Useful Arts.

Mrs Muirhead—Founder of Prize in Civil Law Class.

Subscribers to Lorimer Memorial Fund and Association for the better Endowment of the University—Founders of the Lorimer Travelling Scholarship.

George Scott, Esq., Peckham, London—Founder of the Scott Travelling Scholarship, for purposes of Study or Research.

(C.)—*Founders of New Chairs, Contributors of Endowments to existing Chairs, or of Money, &c., to the University Funds, Library, &c., within the present Century.*

General John Reid—Founder of the Theory of Music Chair, who also bequeathed money to the Funds of the University.

General Sir JOSEPH STRATON—Bequest to the University Funds.

Sir JAMES ERSKINE, of Torry, bequeathed Pictures, Bronzes, and Marbles to the University. [Lent to the National Gallery.]

Sir WILLIAM PULTENEY—Founder of the Chair of Agriculture.

Dr WILLIAM THOMSON—Founder of the Thomsonian Lectureship in Mineralogy.

Dr THOMAS CHARLES HOPE, late Professor of Chemistry—Founder of the Hope Prize.

Sir GEORGE BALLINGALL, late Professor of Military Surgery—Presented his Library to the University.

Dr W. P. ALISON, late Professor of the Theory of Medicine—Presented his Medical Books to the University.

JOHN MUIR, D.C.L., LL.D., Edinburgh—Founder of Sanskrit Chair.

Mrs MARGARET TYNDALL BRUCE—Founder of Prize in Logic Class.

DANIEL ELLIS, Esq.—Founder of "The Ellis Prize" in the Faculty of Medicine.

JOHN EDWARD BAXTER, Esq., of Craigtay, bequeathed the reversion of his Estate for the purpose of founding Scholarships, etc.

Sir DAVID BAXTER, Bart., of Kilmaron—Founder of the Chair of Engineering.

DAVID COWAN, Esq., of Auchendrane, bequeathed £1000 to the Association for Promoting the Endowment of the University.

Dr NEIL ARNOTT gave £1000 for Promoting the Study of Experimental Physics among the Medical Students of the University.

Sir RODERICK IMPEY MURCHISON gave £6000 for the Endowment of the Chair of Geology.

J. O. HALLIWELL PHILLIPPS, Esq., presented his valuable Shakespearean Collection to the University.

ROBERT COX, Esq., W.S., bequeathed £5000 for general purposes and for completing the Dome of the University buildings.

Signor THEOPHILE BUCHER bequeathed his Music Library to the Chair of Music, and reversion of estate to found Scholarships in Music.

THE MERCHANT COMPANY OF EDINBURGH, and other Governors of George Watson's and Daniel Stewart's Hospitals—Founders of the Chair of Political Economy and Commercial Law.

Mr HENRY G. and Miss FRANCES WATSON—Donors of Fund for the "Watson-Gordon Professorship of Fine Art." The Deed of Foundation will be found in CALENDAR for 1873-74, p. 320.

Sir D. BAXTER, of Kilmaron, bequeathed £20,000 for the Extension of the University buildings, and £20,000 for the Further Endowment of the Chairs in the Faculty of Arts.

Miss BROWN, of Lanfine, presented a portion of the Minerals and Fossils which belonged to her father—to be called "The Waterhaugh Collection."

Rev. HEW SCOTT of Wester Anstruther—Founder of the Scott and Dunbar Prize in Greek.

JOHN WILSON, Esq. of South Bantaskine—Founder of the Robert Wilson Prize in Chemistry.

Mrs E. WIGHTMAN—Founder of the Wightman Prize in Clinical Medicine.

THE BELL TRUSTEES, who gave £6000 for the Endowment of the Bell Chair of the Theory, History, and Practice of Education. (Endowment increased in 1886 by £4500, added by Educational Endowments Commission.)

JOHN B. BAILLIE, who transferred the collection of Arabic MSS., formed by Lieut.-Col. Baillie of Leys, to the University Library.

JAMES GEORGE BEANEY, Esq.—Founder of the Beaney Prize.

ANDREW ROBERTSON CAMERON, M.D., of Richmond, New South Wales—Founder of the Cameron Prize.

Dr DAVID LAING, bequeathed his MSS. to the University Library.

Mrs HODGSON, presented Works on Political Economy, collected by her late husband, Prof. Hodgson, to the University Library.

Dr VANS DUNLOP bequeathed £3000 to the General Fund of the University.

SUBSCRIBERS to the CELTIC CHAIR, by whom a fund of £14,000 was raised for the endowment of this Chair by the exertions of Professor Blackie.

Miss MARY DICK bequeathed a moiety of the residue of her estate to accumulate for twenty-one years from 1883, or till it shall amount to £10,000, for the Foundation of a Chair of Comparative or Surgical Anatomy, as considered most to be required.

SUBSCRIBERS of £500 and upwards to the "UNIVERSITY OF EDINBURGH BUILDINGS EXTENSION SCHEME":—[1]

The late Sir David Baxter of Kilmaron, Bart., by bequest, less Legacy Duty,	£18,000	0	0
William M'Ewan, Esq., M.P.,	6,500	0	0
The late Duke of Buccleuch and Queensberry, K.G., D.C.L., LL.D.,	4,000	0	0
The Magistrates and Council of the City of Edinburgh,	3,100	0	0

[1] See Statement of Funds in Calendar, 1889-90, Appendix, p. 22.

The Right Hon. the Earl of Moray,	£2,525	0	0
The Right Hon. The Earl of Rosebery, LL.D.,	2,400	0	0
The Royal College of Physicians of Edinburgh,	1,575	0	0
The Right Hon. the Earl of Stair, K.T.,	1,500	0	0
Messrs John Jeffrey & Co.,	1,500	0	0
The late J. Fulton, Esq., Clinton Road,	1,150	0	0
Charles Andrew Aitchison, Esq., Queen Street,	1,050	0	0
The Most Hon. the Marquis of Bute,	1,000	0	0
Andrew Carnegie, Esq., New York and Pittsburg,	1,000	0	0
The Right Hon. the Earl of Derby,	1,000	0	0
J. R. Findlay, Esq., Rothesay Terrace,	1,000	0	0
The Right Hon. The Earl of Home,	1,000	0	0
The Right Hon. The Earl of Hopetoun,	1,000	0	0
The late Sir William Stirling-Maxwell of Pollok and Keir, Bart., LL.D., M.P.,	1,000	0	0
The Rt. Hon. The Earl of Wemyss and March, LL.D.,	1,000	0	0
The Right Hon. the Lord Justice-General, D.C.L., LL.D., Chancellor of the University,	800	0	0
Messrs Thomas Nelson & Sons,	800	0	0
The late Henry George Watson, Esq., C.A.,	800	0	0
The Most Hon. the Marquis of Lothian,	750	0	0
The Society of Writers to the Signet,	750	0	0
J. Lindsay Bennet, Esq., Taviton Street, London,	710	0	0
James Cowan, Esq., Royal Terrace,	700	0	0
Robert Richardson, Esq., Bruntsfield Place,	700	0	0
C. Morrison, Esq. of Islay,	700	0	0
C. Jenner, Esq.,	650	0	0
The late David Anderson, Esq., of Moredun,	600	0	0
James H. Renton, Esq., Park Lane, London,	600	0	0
Professor Sir W. Turner, LL.D.,	600	0	0
The Most Hon. The Marquis of Hartington,	500	0	0
Charles Cowan, Esq., of Logan House,	500	0	0
T. R. Buchanan, Esq., M.P.,	500	0	0
P. D. Swan, Esq., Provost of Kirkcaldy,	500	0	0
Lady Campbell of Garscube,	500	0	0
The late William Cumming, Esq., M.D., Ainslie Place,	500	0	0
The late James T. Gibson-Craig, Esq., York Place,	500	0	0
Professor Crum Brown,	500	0	0
The Goldsmiths' Company of London,	500	0	0

W. Mackinnon, Esq., of Balinakill and Loup, -	£500	0	0
The late Graham Menzies, Esq. of Hallyburton, -	500	0	0
John Graham Menzies, Esq., Grosvenor Crescent, -	500	0	0
W. D. Menzies, Esq., Grosvenor Crescent, - -	500	0	0
The late Miss Trail, Aberlady, by bequest, - -	500	0	0
Messrs William Younger & Co., Abbey Brewery, -	500	0	0
The Right Hon. The Earl of Zetland, - - -	500	0	0
Anonymous, - - - - - -	500	0	0

The total amount of subscriptions received was £149,048, 2s. 5d.

EARL OF ROSEBERY provided £50 a year for Lectureship on Philosophy of Natural History for five years.

WILLIAM F. CUMMING, M.D., presented a Drinking Fountain, erected in the Quadrangle of the Old Buildings, in 1886.

JOHN HOPE, W.S., presented a Drinking Fountain to the University New Buildings, 1886.

ALEX. GIBSON, Esq., Advocate, bequeathed £2000, free of legacy-duty, to the General Fund of the University.

WILLIAM M'EWAN, Esq., M.P., founder of the M'Ewan University Hall. *See* end of Appendix.

ADAM GIFFORD, Senator of the College of Justice, bequeathed £25,000 for the foundation of a Lectureship for promoting, advancing, teaching, and diffusing the study of Natural Theology in the widest sense of that term.

JOHN FULTON, Esq., bequeathed £3000 to General University Fund, the greater part of which has been devoted to the equipment of the new Engineering Laboratory, called the "Fulton Laboratory."

Miss ELIZABETH STEVEN, of Bellahouston—Founder of the Steven Lectureship in connection with the Chair of Agriculture.

ALEXANDER LOW BRUCE, Esq., Edinburgh, bequeathed £5000 to assist in founding a Chair of Public Health.

Rev. JOSEPH TAYLOR GOODSIR bequeathed £900 to Supplement the Goodsir Memorial Fund.

ROBERT A. GOODSIR, M.D., Edinburgh, bequeathed residue of his Estate, amounting to about £2000, to supplement the Goodsir Memorial Fund.

JAMES RITCHIE, Esq., bequeathed £3000 for University purposes.

HIGHLAND AND AGRICULTURAL SOCIETY, £631, and SCOTTISH ARBORICULTURAL SOCIETY, £433—for further Endowment of Lectureship in Forestry.

Dr PHILIP NELSON, Annan, bequeathed £50 to University Building Fund.

Bequests and Donations during 1894-95.

I. *Bequests.*

Legacy of £50 by the late Dr Philip Nelson, of Annan, to the University Building Fund.

Mr James Ritchie, formerly of Edinburgh, of the residue of his Estate, amounting to upwards of £3000, for University purposes.

The late Dr Robert A. Goodsir, Edinburgh, of the residue of his Estate, amounting to £2000 or thereby, as an addition to the funds of the Goodsir Memorial Prize.

II. *Donations.*

Sums of £631 from the Highland and Agricultural Society, and £433 from the Scottish Arboricultural Society, for the further endowment of the Lectureship in Forestry.

Fellowship of £100 a year in Arts or Pure Science, instituted by the Governors of George Heriot's Trust, and styled the "George Heriot Fellowship."

Writing-table which belonged to the late Professor John Wilson ("Christopher North"), presented by the late Dowager Lady Grant, St Andrews.

Writing-table which belonged to Professor Adam Ferguson, Professor of Moral Philosophy, 1764-1785; a silver coffee-pot given to him by the last Earl Marischal of Scotland; and portrait of the late Professor Joseph Black, presented by Mr R. N. Ferguson, of H.M. Treasury.

Donations to Library.

Besides various valuable contributions from the Governments of Great Britain, Canada, France, India, Italy, New South Wales, New Zealand, Norway and Sweden, Russia, Victoria &c., the University has, in the course of the year 1893-94, received Donations from the following Universities:—Aberdeen, Andover, Basle, Birmingham, Bologna, Bombay, Budapest, Buenos Aires, California, Christiania, Cornell, Glasgow, Groningen, Greifswald, Harvard, Heidelberg, Johns Hopkins, Kiel, Königsberg, Lahore, Leyden, Madras, Madrid, Manitoba, New York, Rome, Padua, Rostock, Toronto, Turin, Utrecht, Warsaw, Yale, Zaragoza. Many other public institutions at home and abroad have also sent their publications:—The Royal Society of Edinburgh; the Royal Scottish Geographical Society, Edinburgh; the Society of Scottish Antiquaries; the Royal Observatory, Edinburgh; the Physical Society, Edinburgh; the Church of Scotland Offices, Edinburgh; the Fishery Board for Scotland; the Highland and Agricultural Society; the Glasgow Archæological Society; the Royal Irish Academy; the British Museum; the Science and Art Department, South Kensington; the Royal Geographical Society, London; the Astronomical Society, London; the Greenwich Observatory; the Birmingham Philosophical Society; the Musée Guimet; the Commission

für Erforschung des östlichen Mittelmeeres; the Smithsonian Institution; the United States National Museum; the Library of the Surgeon-General's Office; the Museum of Comparative Zoology, Harvard; New York State Library; the Royal Society, Victoria: the Australian Museum, Sydney; the New Zealand Institute; the Canadian Institute; the Geological Survey of the United States; the Geological Survey of Minnesota; the Geological Survey of India; the Geological Survey of Canada; the Archæological Survey of India; the Department of Agriculture, Michigan; the Botanic Gardens, Calcutta; the Botanic Gardens, Jamaica; the Trustees of the Baird Lectures; the Trustees of the Hibbert Lectures; the English Guernsey Cattle Society; the Devon Cattle Breeders' Society; the Polled Cattle Society; the Highland Cattle Society of Scotland; the Shropshire Sheepbreeders' Association; the Yorkshire Coach Horse Society, &c., &c.

Among the numerous private donors to whose liberality the Library has been indebted, are:—

The Countess of Derby—The Speeches of Lord Derby.
The Duke of Sutherland—Sir William Fraser's History of the Sutherland Family.
Principal Sir William Muir—Various additions to his collection of Oriental works.
Professor Calderwood—A Vocabulary of Philosophy.
Professor Butcher—Aristotle's Theory of Poetry.
Professor Laurie—A Collection of Educational Works.
Professor Kirkpatrick—A large number of Historical Works.
Professor Nicholson—Historical Progress and Ideal Socialism.
Emeritus Professor Campbell Fraser—Locke's Essay Concerning the Human Understanding.
Sir James Maitland—The History of Howietown.
Mrs Samuel Brown—Bacon's Sylva Sylvarum.
Mrs G. T. Shaw—Theses of Dr George and Dr James Shaw.
Mr W. H. O. Smeaton—MSS. of Adam Ferguson.
Councillor Colston—The Town and Port of Leith.
Mr F. A. Crisp—Fragmenta Genealogica.
Mr Omond—Antichità di Ercolano.
Sr. Altamira—La enseñanza de la historia.
Rev. J. N. Worsley—History of Haddlesey.
Captain W. E. Gowan—A Russian Grammar.
Dr Charles Sarolea—Vauthier, Le gouvernement local de l'Angleterre.
Mr T. Barclay—Papers on International Law.
M. A. Hamon—La France, sociale et politique.
Mr W. G. Don—Reminiscences of the Baltic Fleet of 1855.
Mr John Rae—Life of Adam Smith.
Mr T. N. Kelynack—A Contribution to the Pathology of the Vermiform Appendix.
Mr T. Lauder Brunton—Modern Development of Harvey's Work.

ABSTRACT OF THE ACCOUNTS

OF

The University of Edinburgh

FOR THE YEAR ENDING 31ST AUGUST 1894.

CAPITAL.

I. General University Fund :—			
Funds at beginning of year		£26,012 0 3	
Added during year—			
Accumulations of Parliamentary Grants which accrued prior to the taking effect of Ordinance No. 27 of the Scottish Universities Commissioners, &c. . .	£36,909 17 11		
Quarter's Parliamentary Grant received out of the ordinary date, making five quarters of grant within the financial year . .	3,780 0 0		
Surplus of Revenue over Expenditure for year	2,713 13 0		
		43,403 10 11	
		£69,415 11 2	
II. Funds partly or wholly unappropriated to particular purposes :—			
Funds at beginning of year	£67,681 5 6		
Added during year—			
Legacy by the late Dr Philip Nelson to the University Building Fund .	£50 0 0		
Surplus of Revenue over Expenditure for year . .	263 16 6		
	313 16 6		
		67,995 2 0	
III. Funds appropriated to Particular Purposes other than Bursaries, Scholarships, Fellowships, and Prizes :—			
Funds at beginning of year . . .	£104,831 18 5		
Carry forward,	£104,831 18 5	£137,410 13 2	

	Brought forward,				£104,831	18	5	£137,410	13	2
Added during year—										
Further Endowment of Forestry Lectureship by Highland and Agricultural Society (£631, 6s. 7d.) and Scottish Arboricultural Society (£433, 10s.) .	£1,064	16	7							
Legacy by the late Alexander Low Bruce, Esq., toward the foundation and endowment of a Chair of Public Health	4,500	0	0							
Surplus on Pension Fund .	2,103	6	4							
	£7,668	2	11							
Less Payments out of former Accumulations of Revenue	856	6	2							
					6,811	16	9			
								111,643	15	2
IV. Funds for Bursaries, Scholarships, Fellowships, and Prizes :—										
Funds at beginning of year . . .				£276,654	6	4				
Added during year—										
Buchanan Scholarship Fund, formerly under the management of the Professor of Midwifery, now transferred to the University Court .	£1,296	0	0							
Payment on account of the Residue of the Estate of the late Signor Theophile Bucher for the foundation and endowment of a scholarship in the Faculty of Music	3,000	0	0							
Legacy by the late Dr Joseph Taylor Goodsir in augmentation of the Goodsir Memorial Prize Fund . .	900	0	0							
Legacy by the late Rev. Thomas Maule for the foundation and endowment of four Bursaries in the Faculty of Arts . . .	2,907	9	8							
Carry forward,	£8,103	9	8	£276,654	6	4	£249,054	8	4	

Brought forward,	£8,103 9 8	£276,654 6 4	£249,054 8 4	
Residue of the Estate of the late Rev. John Patterson for the foundation and endowment of a Bursary in the Faculty of Arts . .	551 9 9			
Surplus of Revenue over Expenditure for year . .	2,061 12 8			
		10,716 12 1		
				287,370 18 5
V. Eskbank Feu-duties—Casualty Fund.				
Fund at beginning of year		£226 3 2		
Added during the year :—				
Surplus of Revenue over Expenditure for year		9 3 0		
				235 6 2
Total Funds at 31st August 1894 . . .				£536,660 12 11

Note.—The above Funds are stated at their book value or cost price. The market value of the Funds at the 31st August 1894 exceeded the book value by £32,744. os. 6d. No notice is taken above of the University Buildings, New Medical School, Music Class Room, Principal's Official Residence, and Lecture Hall in Park Place, or of the Library, Museum, and Furnishings of the University, as the values of these are not known.

REVENUE AND EXPENDITURE.

I. General University Fund.

Revenue.	Revenue.	Expenditure.
1. Matriculation Fees	£3,030 0 0	
2. Entrance Fees from Students not matriculated	26 10 0	
3. Preliminary Examination Fees . . .	276 10 6	
4. Graduation Fees :—		
(1) Arts . . . £563 17 0		
(2) Science , . . . 286 12 6		
(3) Medicine . . . 6,390 12 0		
(4) Divinity 35 14 0		
(5) Law 91 7 0		
	7,368 2 6	
5. Fees of Registration of Members of General Council	343 0 0	
6. Fees of Access to Library . . .	46 4 0	
7. Income from Accumulations of the General University Fund	1,186 5 8	
Carry forward,	£12,276 12 8	

	Revenue.	Expenditure.
Brought forward,	£12,276 12 8	
8. Income from Funds bequeathed for general purposes :—		
(1) Straton Fund . . £486 11 8		
(2) Cox Fund . . . 69 13 1		
(3) Gibson Fund . . . 64 19 2		
	621 3 11	
9. Income from Funds partly appropriated to particular purposes, the Surplus Income of which falls to general purposes :—		
(1) Leith Harbour Annuity Fund £669 14 10		
(2) Reid Fund . . . 904 11 11		
	1,574 6 9	
10. Income from Funds specifically appropriated by Deed of Endowment to Class Expenses :—		
(1) Fund for Chair of Engineering . . £34 19 8		
(2) Fund for Chair of Geology . . . 55 12 6		
(3) Fund for Chair of Fine Art 49 15 8		
(4) Fund for Chair of Commercial and Political Economy . . . 74 0 0		
(5) Gilchrist Fund for purchase of apparatus . 88 13 4		
	303 1 2	
11. Income from Parliamentary Grant, inclusive of the quarter received in advance . .	29,752 6 11	
12. Income from Endowment of Chairs in the Faculty of Divinity	253 7 6	
13. Surplus on Fee Fund	4,045 18 1	
14. Royalty from Publisher of University Calendar	100 0 0	
15. Fees from Societies for Use of Rooms, &c. .	23 3 0	
	£48,950 0 0	
Expenditure.		
1. Expenses of Administration :—		
(1.) University Court	..	£925 16 7
(2.) Senatus Academicus . . .	...	1,218 1 2
(3.) General Council	...	205 16 0
(4.) Curators of Patronage	...	7 17 6
(5.) Editing University Calendar . . .	...	50 0 0
Carry forward,	£48,950 0 0	£2,407 11 3

		Revenue.	Expenditure.
	Brought forward,	£48,950 0 0	£2,407 11 3
(6.)	Students' Representative Council . .	...	35 0 0
(7.)	Factor	...	832 1 11
(8.)	Law Agents	...	101 7 5
(9.)	Auditor	...	40 19 0
			£3,416 19 7
2.	Salaries to Principal and Professors :—		
(1.)	Salary to Principal in accordance with Section III. of Ordinance No. 27 of the Scottish Universities Commissioners £995 19 6		
(2.)	Salaries to Professors in accordance with Section VII., Subsection 1 (*b*), of said Ordinance . 4,365 0 0		
(3.)	Salaries to Professors in accordance with Section VII., Subsection 2, of said Ordinance . . 1,000 0 0		
(4.)	Salaries to Professors in accordance with Sections IX. and XI., Subsection 2 (*d*), of said Ordinance . . . 3,542 0 0		
(5.)	Salaries to Professors in the Faculty of Divinity in accordance with Section XI. (*e*) of said Ordinance . . . 453 7 6		
			10,356 7 0
3.	Provision for Pensions to Retired Professors .		5,000 0 0
4.	Upkeep of Buildings :—		
(1.)	Buildings and Furnishings £2,993 11 7		
(2.)	Lighting, Heating, and Cleaning . . . 1,302 13 2		
(3.)	Public Burdens and Feu-Duties . . . 484 15 2		
(4.)	Insurance . . . 211 11 2		
			4,992 11 1
5.	Equipment and Upkeep of Library . .		2,769 18 2
6.	Equipment and Upkeep of Museums . .		395 0 0
7.	Equipment and Upkeep of Laboratories, including Class Expenses		2,113 6 10
	Carry forward,	£48,950 0 0	£29,044 2 8

	Revenue.	Expenditure.
Brought forward,	£48,950 0 0	£29,044 2 8
8. Lecturers and Assistants		6,590 6 11
9. Examiners		2,688 2 0
10. Service		1,009 15 1
11. Class Medals and Prizes		231 11 2
12. Printing and Advertising		568 17 4
13. Graduation Expenses		298 1 10
14. Grant towards the purchase of the University Athletic Field		2,000 0 0
15. Incidental Grants		25 10 0
	£48,950 0 0	£42,456 7 0
Deduct Transfers to other Funds	10,365 0 0	10,365 0 0
Carried to Abstract	£38,585 0 0	£32,091 7 0

II.—Fee Fund Account and Salaries Account:—

	Revenue.	Expenditure.
1. Fee Fund Account	£26,559 4 6	£26,559 4 6
2. Salaries Account	9,169 4 10	9,169 4 10
	£35,728 9 4	£35,728 9 4
Deduct Transfers to other Funds	4,045 18 1	4,045 18 1
Carried to Abstract	£31,682 11 3	£31,682 11 3

III.—Funds Partly or Wholly Unappropriated to Particular Purposes:—

	Revenue.	Expenditure.
1. Leith Harbour Annuity	£2,148 18 10	£2,071 16 3
2. Reid Fund	1,693 6 2	1,693 6 2
3. Reid Professorship of Music, Assistants, and Expenses Fund	333 8 6	145 18 10
4. Straton Fund	486 11 8	486 11 8
5. Cox Fund	69 13 1	69 13 1
6. Gibson Fund	64 19 2	64 19 2
7. University Building Fund	0 6 9	1 2 6
	£4,797 4 2	£4,533 7 8
Deduct Transfers to other Funds	3,449 3 7	3,449 3 7
Carried to Abstract	£1,348 0 7	£1,084 4 1

IV.—Funds appropriated to particular purposes other than Bursaries, Scholarships, Fellowships, and Prizes.

	Revenue.	Expenditure.
1. Baxter Salary Fund	£585 17 7	£585 17 11
2. Bell Chair of Education	370 15 6	371 1 10
3. Celtic Chair	516 5 2	518 6 4
4. Chair of Commercial and Political Economy	524 0 0	524 0 0
5. Chair of Engineering, viz. :—		
(1) Fund for Professor's Salary	194 1 6	194 1 6
(2) Fund for Expenses of the Chair	23 5 10	34 19 8
6. Chair or Lectureship on Forestry	43 18 2	54 13 10
7. Gilchrist Fund	80 1 1	88 13 4
8. Gifford Lectureship	770 3 5	1548 17 2
9. Muir Chair of Sanskrit	226 1 2	250 6 8
10. Murchison Chair of Geology, viz. :—		
(1) Fund for Professor's Salary	181 10 11	181 16 0
(2) Fund for Expenses of the Chair	36 5 9	42 12 4
11. Pulteney Chair of Agriculture	36 6 7	36 8 0
12. Pension Fund	5000 0 0	2896 13 8
13. Steven Lectureship on Agriculture	101 17 9	101 17 9
14. Thomson Lectureship on Mineralogy	43 6 2	47 14 6
15. Watson Gordon Professorship of Fine Art., viz. :—		
(1) Fund for Professor's Salary	428 2 0	428 2 0
(2) Fund for Expenses of the Chair	40 19 9	49 15 8
16. Lectures on Forestry	100 0 0	100 0 0
17. Lectures on Agriculture to Rural Schoolmasters	474 0 0	474 0 0
	£9776 18 4	£8529 18 2
Deduct Transfers to other Funds	3335 9 1	3335 9 1
Carried to Abstract	£6441 9 3	£5194 9 1

V.—Funds for Bursaries, Scholarships, Fellowships, and Prizes.

	Revenue.	Expenditure.
1. Aitken Scholarship	£106 13 8	£53 7 6
2. Ardvorlich Bursary	15 10 6	7 15 4
3. Neil Arnott Prize	40 15 2	40 16 11
4. Neil Arnott Scholarship	37 7 2	37 7 2
5. Baxter Mathematical and Philosophical Scholarships	119 17 11	59 19 3
Carry forward,	£320 4 5	£199 6 2

	Revenue.	Expenditure.
Brought forward,	£320 4 5	£199 6 2
6. Baxter Natural and Physical Science Scholarships	145 1 6	108 12 6
7. Misses Baxter of Balgavie's Scholarships	151 18 2	81 17 10
8. John Edward Baxter Scholarships, viz.:—		
(1) Fund for Scholarships	267 11 7	267 11 10
(2) Fund for Examiners' Fees	11 5 6	10 10 0
9. Bruce of Grangehill and Falkland Bursaries and Scholarships	508 8 9	327 4 9
10. Beaney Prize	36 7 9	0 0 0
11. Buchanan Scholarship	19 13 2	29 3 3
12. Cairns Bursary	18 8 2	18 8 2
13. Cameron Prize	90 14 8	88 13 6
14. Dr John Aitken Carlyle's Medical Bursaries	54 6 10	54 6 10
15. Cousin Prize	14 5 6	14 6 2
16. Bailie Cousin Bursary	27 3 5	27 3 5
17. Cobb Scholarship	33 19 3	33 19 4
18. Crichton Bursaries,	1007 9 10	0 0 0
19. Drummond Scholarship, viz.:—		
(1) Fund for Scholarship	102 9 11	102 9 10
(2) Fund for Examiners' Fees	7 5 5	23 2 0
20. William Dickson Travelling Fund	85 6 10	117 3 6
21. Dundas Bursaries	44 9 3	22 4 7
22. Edinburgh University Endowment Association's Arts Bursaries	120 0 0	160 0 0
23. Ettles' Divinity Scholarships	110 11 8	110 11 7
24. Ettles' Medical Scholarship	33 19 3	0 0 0
25. Ellis Prize	26 10 1	0 0 0
26. Exhibition of 1851 Science Scholarships	225 0 0	300 0 0
27. Falconer Memorial Fellowship, viz.:—		
(1) Fund for Fellowship	108 14 0	108 14 0
(2) Fund for Examiners' Fees	3 17 6	0 0 0
28. Fothringham and Forrest Bursaries	42 19 11	21 9 11
29. James Fairbairn Scholarship	32 9 7	48 14 6
30. Freeland Barbour Fellowship	48 11 7	45 7 10
31. Donald Fraser Bursary	48 9 9	48 13 0
32. Glover Divinity Scholarship	36 15 5	18 7 7
33. Gray Scholarships	84 2 11	85 6 2
34. Guthrie Fellowship	96 1 5	96 1 4
35. Grierson Bursaries	345 18 5	272 7 8
36. Gunning Scholarships	1 19 2	0 0 0
37. Goodsir Memorial Prize.	49 5 8	17 17 5
38. Hamilton Philosophical Fellowship, viz.:—		
(1) Fund for Fellowship	94 17 1	94 14 9
(2) Fund for Examiners' Fees	5 1 10	10 10 0
Carry forward,	£4461 15 2	£2964 19 5

	Revenue.	Expenditure.
Brought forward,	£4461 15 2	£2964 19 5
39. Harrison Bursary	32 5 3	32 5 3
40. Hope Prize	78 15 10	118 12 9
41. Robert Hunter Bursaries	32 15 1	0 0 0
42. Jardine Bursary	42 5 7	58 8 8
43. Jardine of Thorlieshope Bursary	147 17 1	149 4 3
44. Johnston of Harthope Bursary	18 3 10	37 11 4
45. Jeffrey Scholarships	152 16 8	144 8 8
45. David Kidd Divinity Scholarship	33 6 6	33 6 6
47. Kelland Memorial Prize	4 9 4	4 9 8
48. General Lang's Bequest	13 4 0	0 0 0
49. Lockerby Bursary	31 1 8	31 2 4
50. Lorimer Travelling Scholarship	36 12 10	0 0 0
51. Leckie Mactier Fellowship	77 12 6	77 12 7
52. Charles Maclaren Scholarship, viz.:—		
(1) Fund for Scholarship	105 14 7	0 0 0
(2) Fund for Examiners' Fees	7 7 0	0 0 0
53. Maxton Scholarship	41 2 11	34 16 10
54. Mackenzie Classical Scholarship	117 18 1	115 5 7
55. Macpherson Bursaries.	83 5 10	41 13 3
56. Marshall Bursary	36 7 10	36 7 10
57. Mackenzie Bursaries in Anatomy	39 19 3	35 9 1
58. Mackinnon Bursaries	59 13 6	36 7 8
59. Mann Bursaries	77 12 8	25 17 7
60. Mackie Bursaries	58 4 6	58 4 6
61. Maclaurin Bursary	71 6 5	71 6 6
62. Maule Bursaries	38 15 1	67 8 7
63. Milner Fothergill Prize	9 14 2	4 4 0
64. Muirhead Prize	16 19 8	16 19 8
65. Newton Bursaries	84 14 5	84 15 10
66. Prizes in Sanskrit	0 0 0	12 12 0
67. Pitt Club Classical Scholarship	55 16 5	53 4 4
68. Pitt Club Theological Scholarship	111 11 0	101 1 1
69. Patrick Bursaries	103 12 11	102 0 6
70. Pattison Bursary	7 0 2	0 0 0
71. Patterson Bursary	16 12 0	13 7 6
72. Rhind Scholarships	170 15 6	170 15 7
73. Renton Bursary in Arts	18 18 1	9 9 1
74. Renton Bursary in Divinity	19 5 11	19 5 10
75. Horsliehill Scott Bursary	74 11 11	74 11 11
76. Shaw Philosophical Fellowship	156 2 1	156 2 3
77. Shortt Bursary	8 14 4	0 0 0
78. Steven of Bellahouston Scholarship	72 15 6	72 15 7
79. Syme Surgical Fellowship, viz.:—		
(1) Fund for Fellowship	107 2 4	107 2 2
(2) Fund for Examiners' Fees	8 11 6	0 0 0
Carry forward,	£6943 6 11	£5173 6 2

	Revenue.	Expenditure.
Brought forward, .	£6943 6 11	£5173 6 2
80. Scott and Dunbar Prize . . .	26 18 4	34 16 9
81. Dobbie Smith Prize	4 17 6	0 0 0
82. Mackay Smith Scholarships, viz. :—		
(1) Fund for Scholarships . . .	97 0 10	97 0 10
(2) Fund for Examiners' Fees . .	3 4 2	0 19 6
83. Stark Scholarship	54 6 10	0 0 0
84. James Scott Scholarship . . .	41 3 5	41 9 7
85. Tarsappie Bursary	4 8 2	0 0 0
86. Trevelyan Scholarship . . .	30 5 1	0 0 0
87. Vans Dunlop Scholarships . . .	2,372 17 1	2,190 15 10
88. Wightman Prize	11 12 10	11 12 10
89. Robert Wilson Prize	8 11 0	7 4 11
90. Webster Bursaries	148 19 0	130 6 9
91. John Welsh Bursaries . . .	194 16 3	262 18 3
92. Whitelaw Bursaries	68 7 2	22 15 11
93. King William III. Bursaries . .	48 10 10	24 5 5
Carried to Abstract . .	£10,059 5 5	£7,997 12 9

VI. Eskbank Feu-Duties—Casualty Fund.

	Revenue.	Expenditure.
Total amount of Feu-Duties and Expenditure therefrom . . .	£489 5 7	£480 2 7
Deduct transfer to other Funds .	462 16 6	462 16 6
Carried to Abstract . .	£26 9 1	£17 6 1

ABSTRACT OF REVENUE AND EXPENDITURE.

	Revenue.	Expenditure.
I. General University Fund . .	£38,585 0 0	£32,091 7 0
II. Fee Fund Account and Salaries Account	31,682 11 3	31,682 11 3
III. Funds partly or wholly unappropriated to particular purposes .	1,348 0 7	1,084 4 1
IV. Funds appropriated to particular purposes other than Bursaries, Scholarships, Fellowships, and Prizes	6,441 9 3	5,194 9 1
V. Funds for Bursaries, Scholarships, Fellowships, and Prizes . .	10,059 5 5	7,997 12 9
VI. Eskbank Feu-Duties—Casualty Fund	26 9 1	17 6 1
Total Revenue and Expenditure,	£88,142 15 7	£78,067 10 3

The University Court.

ABSTRACT OF THE PROCEEDINGS OF THE UNIVERSITY COURT, FROM 1ST MAY 1894 TO 1ST MAY 1895.

MONDAY, 14TH MAY 1894.—The Minutes of last meeting were submitted and approved.

The following Draft Ordinances received from the Universities' Commissioners were remitted to the Draft Ordinances Committee :—Edinburgh No. 16—Regulations for Hume Foundation. Edinburgh No. 17—Regulations for Buchanan Foundation. General No. 21—Supplementary to Ordinance No. 9 (General No. 4—General Council); General No. 22—Regulations for the Students' Representative Council; General No. 23—Regulations for the encouragement of Special Study and Research; and General No. 24—Regulations for Higher Degrees in Arts and Science. The time for lodging objections, &c., to the first four of these Draft Ordinances expires 18th July, and to the last two 14th October next.

Receipt was intimated of £433, 10s., on account of subscriptions collected by the Royal Scottish Arboricultural Society towards the endowment of Forestry in the University.

The Professor of Engineering was authorised to undertake "Commercial Testing" in the Fulton Laboratory on conditions, and a scale of charges approved.

The Fee for the Summer Course in Civil Law, if taken apart from the Winter Course, was fixed at £2, 2s.

The Works Committee submitted their report, containing regulations as to the duties of a night watchman for the University Buildings. The report was approved.

The same Committee gave in their half-yearly report on repairs and jobbing work.

The amendments suggested by the Draft Ordinances Committee on the Commissioners' Draft Ordinance (General No. 19—Regulations as to Bursaries, Scholarships, and Fellowships) were approved and directed to be forwarded to the Commissioners.

A letter from Colonel G. L. Fraser, Evelyn Gardens, London, was read, announcing that, in compliance with the wishes of the late Miss J. Straton Graham of Kirkside, he had forwarded as a gift to the University a portrait of the late General Sir Joseph Straton, a munificent benefactor of the University. In accepting the picture, the Court in-

structed the Secretary to express to Colonel Fraser their appreciation of the gift.

A letter from Dr A. G. Miller, Edinburgh, was read, intimating his wish to present to the University, as a gift from himself and family, a marble bust of his father, the late James Miller, Esquire, Professor of Surgery in this University. The Court accepted the gift, with thanks to the donors.

A letter from Dr W. S. Forbes, Philadelphia, U.S.A., was read, intimating the gift, through Sir William Turner, to the University, of the skeleton of a buffalo, which had already been received, mounted, and in every respect ready for exhibition. The Court resolved to convey to the donor their thanks for this very valuable gift.

Copies of reports by Committees of the General Council were submitted.

The Finance Committee reported that they had passed awards of bursaries and various accounts for payment.

The fees to examiners in the preliminary and graduation examinations of April last, submitted by the same Committee, were approved.

Monday, 18th June 1894.—It was intimated that copies had been received of Orders of Her Majesty in Council approving of Ordinances Nos. 39 to 44 inclusive.

The Commissioners' Draft Ordinances, Edinburgh, Nos. 18 to 25 inclusive, and General, Nos. 25 to 28 inclusive, were remitted to the Draft Ordinances Committee.

The Court proceeded to the election of a Professor to the Chair of History, instituted by Ordinance No. 30. The names of Mr G. W. Prothero, M.A., Litt.D., Cambridge, and of Mr P. Hume Brown, M.A., Edinburgh, were proposed, and it being ascertained that there was a majority of 8 to 5 in favour of Mr Prothero, that gentleman was elected to the Chair.

The Rev. Dr M'Laren, Larbert, was reappointed a Governor of Stirling Educational Trust for a further period of five years from 1st August next, when his second period of office as a Governor expires.

Professor Butcher was appointed Examiner in Classics, to represent the University on the Joint Board of Examiners of the Scottish Universities for the remainder of the year ending 31st January 1895.

In terms of a notice of motion given at last meeting, the Court agreed to exercise the power conferred on them by Ordinance No. 18, section 1, for Graduation of Women in Medicine.

It was reported that the University Endowment Association had, subject to the acceptance of the Court, instituted four unrestricted competition bursaries in the Faculty of Arts, two of the annual value of £20 each (or one of £40), to be competed for in the beginning of Session 1894-95, and two of the annual value of £20 each (or one of £40), to be competed for in the beginning of Session 1895-96, these bursaries to be tenable for three years. The Court accepted the bursaries.

On an application by Professor Niecks, a grant of £150 from the Reid Fund was made towards defraying the expenses connected with historical concerts proposed to be held in the course of next winter session.

It was reported that the Senatus had agreed to extend the benefit of Clause XXII. of the Arts Ordinance to Mr W. E. J. Wallis, on condition of his completing the Preliminary Examination in Arts by April 1895; and to Mr C. Stuart Wallace, on grounds specified in their report.

It was agreed to renew Mr A. G. Bruce's recognition as an extramural Teacher in Practical Materia Medica whose courses of instruction qualify for Graduation in Medicine.

The MSS. of the Class Lectures of Dr Adam Ferguson, Professor of Moral Philosophy in the University of Edinburgh from 1764 to 1785, and copies of his Moral and Political Philosophy, &c., annotated by himself, were accepted as a gift to the University Library, with thanks to the donor, Mr W. H. O. Smeaton, 37 Mansion House Road.

Subscriptions of £262, 10s. and £52, 10s., from the Royal College of Physicians, Edinburgh, and the Royal College of Surgeons, Edinburgh, respectively, to the University Recreation Field Fund, were intimated and accepted.

On the recommendation of the respective Professors, the Court appointed Mr James Ballantine and Mr Robert Connon to be University Assistants in Scots Law and Conveyancing respectively for the ensuing academic year.

The Court approved of various reports submitted by the Business and Law Committee. The Finance Committee reported that they had passed various accounts for payment.

Monday, 16th July 1894.—Before proceeding to the ordinary business of the Meeting, the Court unanimously resolved to present a loyal and dutiful address to the Queen on the birth of a son and heir to His Royal Highness the Duke of York.

The Minutes of last meeting were submitted and approved.

Mr James C. Smith, M.A. (Edin.), B.A. (Oxon.), Classical Lecturer, Owen's College, Manchester, was appointed Additional Examiner in Classics in the University, for a period of four years from 1st October next.

Mr Andrew P. Aitken, D.Sc., Edinburgh, was appointed University Lecturer on Agricultural Chemistry.

The Deed of Constitution of the Crichton Bursaries and Scholarships having been submitted, it was agreed to request the Senatus to prepare a draft scheme of administration.

The Court approved of the recommendations of the Senatus that two honours half-courses in English during the first and second halves of the winter session 1894-95, and also an honours half-course during the summer session 1895, be given by the University Lecturer in English;

that any two of these half-courses be held as equivalent to a whole course for the purpose of graduation in honours in English, the fee for each half-course taken separately to be £2, 2s.; the fee for two half-courses taken in the same academic year to be £3, 3s.

The Court approved of the recommendation of the Senatus that each of the Lecturers in French and German should deliver both a full ordinary and a full honours graduation course in the ensuing winter session; the fee for each of these courses to be £3, 3s.

The Court approved of the recommendation of the Senatus that Professor Prothero should give a full ordinary course, and also a full honours course in History during the ensuing winter session; the fee for each of these courses to be £3, 3s.

Recognition for purposes of graduation in Medicine was granted to the following extra-mural teachers:—(1) R. W. Philip, M.D., Edinburgh (Medicine); (2) J. V. Jones, M.A., B.Sc., Cardiff (Physics); (3) Professor Percy F. Frankland, Birmingham (Chemistry); (4) A. W. Hughes, M.B., Cardiff (Anatomy); (5) Dr R. Milne Murray, Edinburgh, and others, on change of premises; (6) A. H. Trow, B.Sc., Cardiff (Botany); (7) Professor Haycraft, Cardiff (Physiology); (8) Professor Lewis, Aberystwyth (Physics); (9) James Musgrove, M.D., Edinburgh (Anatomy); (10) J. R. Whitaker, M.B., Edinburgh (Anatomy).

Rules as to the recognition of courses of instruction given by extra-academical lecturers as qualifying for graduation in Medicine in the University under Ordinance No. 16 of the Scottish Universities Commissioners, 1889, were submitted and approved.

The following readjustment of fees in Law Classes was agreed to:—(1.) £2, 2s. for the half-course in Philosophy of Law, and £2s, 2s. for the half-course on Public International Law—that is, £4, 4s. for the whole course on Public Law; (2.) £5, 5s., as heretofore, for the winter and summer courses of Civil Law when taken together, but £4, 4s. for students taking the winter course only, in order to qualify for graduation in Arts; (3.) £5s, 5s., as heretofore, for the winter and summer courses on Scots Law when taken together, but £4, 4s. only for students desiring to attend the winter course only, and £2, 2s. for the half-course in summer; (4.) £4, 4s. for a full course, or £2, 2s. for each half-course, on Constitutional Law and History.

The following readjustment of fees for the use of the Chemical Laboratory was approved:—Winter session, £10, 10s.; summer session, £5, 5s.; winter session, half-day, £6, 6s.; half winter session, all day, £5, 5s.; half winter session, half-day, £3, 3s.; summer session, half-day, £3, 3s.

The Court approved of the Draft Ordinances Committee's amendments on Draft Ordinances, Edinburgh, No. 18, and General No. 22. Draft Ordinances, Edinburgh, Nos. 16 and 17, and General No. 25, were approved.

The Finance Committee reported that they had passed various

accounts for payment. The recommendations of the Works Committee for various alterations and repairs were adopted.

Monday, 22nd October 1894.—The Minutes of last meeting were submitted and approved.

A letter from the Secretary for Scotland was read, announcing that the Queen had most graciously received the loyal and dutiful Address which the Court at their last meeting had unanimously resolved to present to Her Majesty.

It was intimated that Orders in Council had been received, (1) Continuing the powers of the Universities Commissioners until 1st January 1896, and (2) Approving of Ordinance No. 50—Fees for Matriculation and Entrance, &c.

The Commissioners' Draft Ordinance, General, No. 29 (Examiners), was remitted to a committee.

It was reported that Ordinances No. 56, Edinburgh, No. 10 (supplementary medicine), and Nos. 57 and 58, General, Nos. 19 and 20 (bursaries), had been laid before Parliament.

In pursuance of their resolution of 18th June last to exercise the power conferred on them by Ordinance No. 18, section 1, for the Graduation of Women in Medicine, the Court resolved to recognise the Edinburgh School of Medicine for Women, Surgeon Square, and the Medical College for Women, 30 Chambers Street, Edinburgh, as Medical Schools whose Courses of Instruction qualify for Graduation in Medicine, subject to conditions communicated to each of these Schools.

It was intimated that the Chair of Hebrew and Semitic Languages had become vacant by the death of the Rev. Professor Dobie.

The University Assistants in the several departments were appointed for the current academical year. The members of the Standing Committees of the Court were reappointed for the current academical year. The Court's representatives on the Library and Museum Committees were reappointed for the same period. Mr T. G. Dickson, C.A., was appointed to audit the Report on the State of the Finances of the University for 1893-94.

A letter from Mr John P. Coldstream, W.S., was read, intimating his resignation of the office of Lecturer on Procedure in the Civil and Criminal Courts of Scotland, on the ground of his having removed from Edinburgh as a place of residence. Mr Coldstream's resignation was accepted.

The University Lecturers in Latin, Greek, Mathematics, Logic, English, Moral Philosophy, and Natural Philosophy were reappointed for the current academical year.

The Court appointed the following gentlemen to be University Lecturers for the current academical year in the subjects specified, viz. :—Dr L. Dobbin (Chemical Theory), class fee, £1, 1s. ; Dr H. Marshall (Mineralogy and Crystallography), £2, 2s. ; Mr G. S.

Corstorphine (Petrology), £2, 2s.; Dr J. Beard (Embryology and Vertebrate Zoology), £3, 3s.; Dr Carlier (Experimental Physiology and Histology), £3, 3s.; Dr D. Hepburn (Regional Anatomy), Dr J. Tillie (Experimental Pharmacology), Dr R. Muir (Pathological Bacteriology).

The Court approved of the appointment of a Lecturer on International Private Law for a period of three years, the course to be one of forty lectures. The recommendations of the Finance Committee providing for the class expenses in the various departments were adopted.

The Draft Ordinances Committee's amendments on the Commissioners' Draft Ordinances, Edinburgh No. 21, and General Nos. 23, 26, and 27, were approved. These Draft Ordinances, together with Draft Ordinance, General No. 21, as amended by the Court, were directed to be forwarded to the Universities Commission.

Intimation was received from the Senatus of the induction of Professor Prothero.

It was intimated that the Senatus had re-elected Professor Butcher as one of their representatives on the Court for the period of four years from 29th November next.

The recommendations of the Senatus as to the arrangements for conducting the Classes of Hebrew, Ecclesiastical History, and Biblical Criticism were approved.

Recognition of his laboratory for purposes of Graduation in Science in the Department of Public Health was granted to Professor Frankland, Mason College, Birmingham.

Dr Berry Hart, Edinburgh, was recognised as a Teacher of Midwifery; and Mr John Hunter, Edinburgh, as a Teacher of Chemistry and Practical Chemistry, whose courses of instruction qualify for Graduation in Medicine.

On the recommendation of the Senatus, the Court resolved that students whose attendance on the elementary course of lectures, and the elementary practical class of Botany and Zoology, does not entitle them to a full certificate for Graduation in Arts, may make up the seventy-five attendances required by attending (without additional fee) any other course of lectures in the Botanical or Zoological Departments which consist of not less than twenty-five meetings, provided that the whole course thus made up satisfies the regulations regarding proportion of laboratory or practical work required from students in Arts as already sanctioned by the Court.

The Court approved of the arrangements recommended by the Senatus for the course in Agricultural Chemistry, the course to consist of lectures and laboratory work; the lectures to begin on 8th January next, and to be given thereafter on Tuesdays, Thursdays, and Fridays during January, February, and March, at 3 P.M. The laboratory work to begin on 4th February, and to be carried on during February and March on Mondays and Wednesdays from 2 to 4 P.M. The fee for the course was fixed at £3, 3s.

On the recommendation of the Senatus, the Court approved of a proposal of the Professor of Chemistry to give a new course in Organic Chemistry: the course to be given in summer, and to consist of fifty lectures at a fee of £2, 2s. The recommendation that the Professor of Chemistry's advanced course should be held in winter instead of summer was approved.

Monday, 12th November 1894.—The Minutes of last meeting were submitted and approved.

The Right Hon. the Lord Provost (M'Donald) took his seat for the first time as a member of the Court *ex officio.*

The Commissioners' Draft Ordinances (Edinburgh, No. 26—Regulations for Baxter Physical and Natural Science Scholarships), and (General No. 31—Regulations as to application of Parliamentary Grants, &c., supplementary), were remitted to the Draft Ordinances Committee.

The Court approved of the arrangements under which Professor Sir Ludovic Grant was to undertake the Secretary's duties for six months from 1st November.

The Secretary was instructed to advertise in due course the Additional Examinerships which fall vacant on 31st December in—(1.) Divinity; (2.) Law (Roman, Public, and Constitutional); (3.) Natural History; and (4.) Clinical Surgery. The appointment of Additional Examiners in—(1.) Modern Languages; (2.) Sanscrit; (3.) Political Economy; (4.) Astronomy; (5.) Geology; (6.) History; (7.) Archæology—for the current academical year, was referred to a committee.

Colonel Bailey, R.E., was reappointed University Lecturer on Forestry for three years from 17th January next.

The Secretary was instructed to advertise the Lectureship in International Private Law, applications for which to be sent in by 12th December.

The Court recognised Mr J. Falconer King as a teacher of Chemistry and Practical Chemistry in Edinburgh whose courses of instruction qualify for Graduation in Medicine.

Various questions in connection with the Graduation of Women in Medicine were remitted to a committee.

The reports of the Finance Committee on accounts and awards of bursaries, &c., passed for payment, were approved.

The reports of the Works Committee as to various alterations in the class-rooms, &c., were approved. The report on the maintenance of buildings, &c., was remitted to the Finance Committee.

It was intimated that the University Accounts for 1893-94 had been received, and they were remitted to the Finance Committee for consideration and report.

The Court approved of a suggestion made by the Draft Ordinances Committee in reference to Draft Ordinance (Edinburgh No. 19—Macpherson Foundation). The same committee reported that they had no amendments on Draft Ordinance (General No. 29—Examiners).

A letter was read from the Dowager Lady Grant, St Andrews, offering to present to the University a writing-table which belonged to the late Professor Wilson. The gift was accepted by the Court, with thanks to the donor.

The Court authorised a grant to the library of £50 for each of the departments of French and German for the purchase of foreign books in view of the very special circumstances of these departments.

The class returns for 1893-94 were remitted to a committee. It was reported that the following Extra-Academical Lecturers have ceased to give courses qualifying for graduation:—(1.) Alex. Napier, M.D., Glasgow; (2.) Claude F. Henry, Edinburgh; (3.) William Mair, Dundee; (4.) J. Rymer Paterson, B.Sc., Edinburgh; (5.) C. W. Cathcart, M.D., Edinburgh.

On the recommendation of the Dean of the Faculty of Arts, the Court agreed to certain arrangements with regard to the remuneration of the Examiners in certain of the Arts and Science preliminary subjects.

Monday, 17th December 1894.—The Minutes of last meeting were submitted and approved.

The Commissioners' Draft Ordinances (General No. 30—Establishment of the General University Court) and (General No. 32—Date of the Rectorial Election) were remitted to the Draft Ordinances Committee.

Mr George Wardlaw Burnet, M.A., B.L., Advocate, Edinburgh, was appointed University Lecturer in International Private Law for a term of three years from 1st January next.

On the recommendation of Professor Balfour, Dr W. G. Smith was appointed University Lecturer on Plant Physiology for the current academical year.

The following Additional Examiners were reappointed:—Mr C. D. Campbell (Modern Languages); Mr George Gardiner, M.A., D.Sc. (Sanscrit); Mr A. H. B. Constable, LL.B. (Political Economy); Mr J. L. E. Dreyer, Ph.D. (Astronomy); Mr H. M. Cadell, B.Sc. (Geology); Mr J. Mackinnon, M.A., Ph.D. (History); Mr W. M. Conway (Archæology and Art, History of); Mr D. A. Stevenson, B.Sc., M.I.C.E. (Engineering); and Mr W. Owen Williams, F.R.C.V.S. (Veterinary Hygiene). Mr A. S. Murray, head of the Department of Antiquities, British Museum, was appointed Additional Examiner in Classical Archæology. On the recommendation of the Senatus, the Court appointed Dr James O. Affleck, Additional Examiner in Medicine in its bearings on Public Health.

Acting under the powers conferred upon them by Ordinance No 18, section V. (3), the Court accepted as adequate the preliminary examinations passed by various students of the Edinburgh School of Medicine for Women and the Medical College for Women, Edinburgh, who had begun their medical studies prior to October 1892.

A report was submitted from the Senatus intimating that permission had been granted, under Ordinance No. 11, section XXII., to certain

women students to count for graduation in Arts those Arts courses which they had attended in their Science course prior to passing the Arts preliminary examination; and, further, that permission had been granted, under Ordinance No. 12, section X., to a student in Science to count for graduation, Classes in Science he had attended and is now attending, on condition of his completing the preliminary examination next October.

On the recommendation of the Senatus, the Court approved of the appointment of Mr J. J. Cook, LL.B., Advocate, Edinburgh, as Interim Lecturer on Procedure in the Civil and Criminal Courts of Scotland, and continued the appointment until the completion of the course. The Court approved of the alterations suggested by the Senatus on the regulations for the Mackenzie (Stornoway) Bursary.

On the recommendation of the Senatus, the Court approved of the syllabus of the course in Agricultural Chemistry for 1895.

The Court recognised the course in Chemistry given by Mr T. W. Drinkwater, Ph.D., and the course in Zoology given by Mr J. Arthur Thomson, M.A., as qualifying Women Students for Graduation in Arts, under Ordinance No. 18, section III. (2).

The Secretary was instructed to advertise in January for an Additional Examiner in each of the following departments:—(1) Logic and Metaphysics and Moral Philosophy; and (2) English; the appointment to be for four years from 1st proximo.

It was intimated by the Senatus that the Faculty of Divinity had appointed Dr Adam Milroy, Minister of the Parish of Moneydie, to be Gunning Lecturer in place of Dr Macmillan resigned.

The Court agreed to provide for the class expenses for the current year of the Lecturers in Latin, Greek, Mathematics, and English who had submitted estimates.

The Court approved of the following scale of Fees for the class of Clinical Surgery:—Six months ticket, £4, 4s.; nine months ticket, if taken primarily, £6, 6s., this to rank as a perpetual ticket; three months ticket after a six months ticket has been taken, £3, 3s.; three months ticket, if a primary entry, £3, 3s.; if a second three months is asked for, £2, 2s.; if a third three months is asked for, £2, 2s. The Court also approved of the following scale of Fees for the class of Agriculture:—For a second attendance, £3, 3s., in place of £4, 4s. paid for a first attendance; for Students who have been in attendance for two years, no Fee; perpetual ticket, if taken primarily, £6, 6s.

The Finance Committee presented their Report on the University Accounts for the year 1893-94, which was approved.

The Court approved of the Amendment suggested by the Draft Ordinances Committee on the Commissioners' Draft Ordinance (General No. 31—Parliamentary Grants, Supplementary).

Letters were read from Mr R. N. Ferguson, Her Majesty's Treasury, offering to present to the University (1) a writing-table which belonged to his great grand-uncle, the late Professor Adam Ferguson, and (2) a

silver coffee-pot given to Professor Adam Ferguson by the last Earl Marischal of Scotland. The Court accepted these gifts, and the Secretary was instructed to thank the donor.

On the recommendation of the Professor, Mr J. S. Flett, M.A., M.B., B.Sc., was appointed University Assistant in Geology for the current academical year.

Monday, 14th January 1895.—The Minutes of last meeting were submitted and approved.

The Commissioners' Draft Ordinances — (1) Edinburgh No. 27—Regulations for Dr George Swiney's Foundation; (2) Edinburgh No. 28 — Regulations for M'Lurg and Penman Foundations; (3) Edinburgh No. 29—Regulations for Struthers and Leighton Foundations; (4) General No. 33 —Accumulations of Revenues of Foundations —were remitted to the Draft Ordinances Committee.

Mr William Mitchell, D.Sc., intimated his resignation as Additional Examiner in "Mental Philosophy," and as a member of the Joint Board of Examiners, on the ground that he had been appointed to the Professorship of Philosophy and English in the University of Adelaide. The Court accepted his resignation.

A letter was read from the Factor intimating a bequest to the University by the late James Ritchie, formerly of Edinburgh, of the residue of his estate, amounting to upwards of £3000.

The Court approved of the action of the Joint Administrative Board on Agriculture, at their meeting of 9th inst., with reference to the composition of the Board.

The Court's Reports as to Statistics and Finance for 1893-94, under Section 30 of the Act of 1889, were submitted and approved, and directed to be transmitted to the Secretary for Scotland.

Acting under the powers conferred by Ordinance No. 50, Section 2, the Court granted permission to persons who have not matriculated (subject to the other provisions of the section) to attend the Chemical Laboratory on payment of an entrance fee of 5s. in addition to the authorised laboratory fee.

The Rev. Alexander Martin, having intimated his resignation as a representative of the Court on the Library Committee, Dr Hoernlè was appointed in his place for the remainder of the current academical year.

It was intimated by the Principal and Deans Committee of Senatus that Mr A. H. B. Constable, Additional Examiner in Political Economy, had been authorised *ad interim* to conduct the class of Political Economy during Professor Nicholson's absence owing to ill-health. The Court approved.

Various fees to examiners, &c., recommended by the Finance Committee, were passed for payment.

Monday, 18th February 1895.—The Minutes of last meeting were submitted and approved.

The Court elected Professor Chrystal as Examiner in Mathematics

and Dynamics, and Mr James C. Smith, M.A. (Edin.), B.A. (Oxon.), as Additional Examiner in Classics, to represent the University on the Joint Board of Examiners for the year from 1st instant.

The following appointments to Additional Examinerships were made for four years from 1st ult. in each case, viz. :—In Logic and Metaphysics, and Moral Philosophy, Mr James L. M'Intyre, M.A., D.Sc., Edinburgh; in the Faculty of Divinity, the Rev. George Gardiner, B.D., Kirknewton, and the Rev. Arthur Pollok Sym, Lilliesleaf; in Roman, Public, and Constitutional Law, Mr J. Roberton Christie, LL.B., Advocate, Edinburgh; and in Natural History, Mr Arthur E. Shipley, M.A., Christ's College, Cambridge. The appointment of Additional Examiners in English and Clinical Surgery was deferred.

On the recommendation of Professor Geikie, Mr J. S. Flett, M.A., Assistant in Geology, was appointed University Lecturer on Petrology for the current academical year.

On the recommendation of Professor Kennedy, Mr W. B. Stevenson, B.D., was appointed University Assistant in Hebrew, &c., for the remainder of the current academical year.

The Court approved of the regulations for the Crichton Bursaries and Scholarships proposed by the Senatus.

Mr Cameron Morrison, LL.B., St Andrews, was appointed *ad interim* Additional Examiner in Political Economy so long as Mr Constable continued to discharge Professor Nicholson's duties.

Intimation was made of the induction of the Rev. A. R. S. Kennedy, B.D., D.D., as Professor of Hebrew and Semitic Languages.

The Senatus intimated that Mr Robert Cox of Gorgie had presented to the University a bust in plaster of the late Professor Edward Forbes. The Court accepted the gift, with thanks to the donor.

Dr R. O. Cunningham, Queen's College, Belfast, was recognised as a teacher of Zoology, and Mr R. Turnbull, B.Sc., Edinburgh, was recognised as a teacher of Botany, whose courses of instruction qualify for Graduation in Medicine. Recognition was granted to Dr J. J. Charles, Queen's College, Cork, as a teacher of Physiology, whose course qualifies for Graduation in Medicine, on the condition that the course of instruction embrace both his ordinary course and the course for senior students.

The Finance Committee reported that various accounts, awards of bursaries, &c., had been passed for payment.

The reports of the Works Committee as to various alterations, &c., were approved.

The Draft Ordinances Committee reported that they had no amendments to make on Draft Ordinances Edinburgh No. 27 (George Swiney's Foundation); Edinburgh No. 28 (M'Lurg and Penman Foundations); and Edinburgh No. 29 (Struthers and Leighton Foundations). The Court adopted a joint recommendation of the Draft Ordinances and Business and Law Committees, that Draft Ordinance General No. 30 (Establishment of the General University Court) be withdrawn.

The Court approved of the amendment suggested by the Draft Ordinances Committee on Draft Ordinance General No. 33 (Accumulations of Revenues of Foundations).

The Court approved of various recommendations by the Committee appointed to consider questions relating to the Graduation of Women in Medicine.

The annual report of the Students' Representative Council for 1893-4 was remitted to the Finance Committee.

The factor intimated that the late Dr Robert A. Goodsir, Edinburgh, had bequeathed the residue of his estate (about £2000) to the University as an addition to the funds of the Goodsir Memorial Fellowship.

A letter was read from Mr R. N. Ferguson, H.M. Treasury, offering to present to the University a portrait by David Martin of the late Professor Joseph Black. The Court agreed to accept the gift, with thanks to the donor.

A letter was read from Mr Thomas Barclay, LL.B., member of the Institute of International Law, Paris, offering to present to the University "a volume of stray papers on legal subjects." The Court accepted the gift with thanks.

FRIDAY, 8TH MARCH 1895 (Special Meeting).—The Court appointed Mr Stewart Alan Robertson, M.A., Edinburgh, as Additional Examiner in English for four years from 1st January last, and as a Member of the Joint Board of Examiners of the Scottish Universities for the year to 31st January next.

Dr C. W. Cathcart was appointed an Additional Examiner in Clinical Surgery for one year from 1st January last.

MONDAY, 18TH MARCH 1895.—It was intimated that the Commissioners' Ordinances, Nos. 59 to 66 inclusive, had been laid before both Houses of Parliament.

A letter from the Secretary of the Board of Agriculture was read, intimating that the Board had been pleased to award a grant of £450 for instruction in Agriculture, and also a grant of £100 for instruction in Forestry, for the year ending 31st current.

On the recommendation of Professor Kennedy, the Rev. D. M. Kay, B.D., B.Sc., was appointed University Assistant in Hebrew and Semitic Languages for the ensuing summer session, *vice* Mr W. B. Stevenson, resigned.

On the recommendation of the Senatus, the Court approved of Professor Copeland's proposal to open a Class of Practical Astronomy during the summer session—fee, £2, 2s.

On the recommendation of the Senatus, the Court fixed the fee for the Degree of Mus. Bac. at £10, 10s., divided as follows:—£3, 3s. for the First Professional; £1, 1s. for the literary part of the Second Professional; £3, 3s. for the musical part of the Second Professional; and £3, 3s. for the Diploma. It was further resolved that a candidate be

charged 10s. 6d. for each reappearance in each subject in which he may have failed.

The Court approved of the additions which the Senatus proposed to make on the regulations for the Mackie Bursaries, so as to provide for cases in which a vacant Bursary may be awarded to either a senior or a junior student.

Dr Marcus Hartog, Queen's College, Cork, was recognised as a teacher whose Course of Instruction in Zoology qualifies for graduation in Medicine.

The Finance Committee reported that they had raised the fee for the Class of Experimental Pharmacology from £1, 1s. to £3, 3s., as recommended by the Senatus.

The Court, as authorised by Section X. of Ordinance No. 64, presently before Parliament, fixed the amount of the subscription payable by Members of the General Council who wish to borrow books from the University Library at 10s. 6d. per annum; the year to run from date of payment, and not from 15th October as previously. It was agreed that a payment of £5, 5s. should entitle Members of the General Council to library privileges for life. In terms of Section XI. of same Ordinance, the Court fixed the amount of the deposit payable by students who desire to borrow books, at £1, on the conditions previously required.

A letter was read from Colonel Bailey, R.E., Secretary of the Royal Scottish Geographical Society, requesting the loan of the Rae Collection of Arctic relics for exhibition at a Conversazione to be given by the Society next June, in commemoration of the departure of Sir John Franklin's expedition. The Court granted this request.

Monday, 22nd April 1895.—Before proceeding to the business of the day, the Court resolved to place on record their sense of the loss which the University has sustained in the death of Professor Goodhart, and the Secretary was instructed to send to the Hon. Mrs Goodhart an expression of the Court's profound sympathy in her bereavement.

The Minutes of last meeting were submitted and approved.

The Court approved of the arrangement under which, during Professor Taylor's prolonged absence, Professor Sir Ludovic Grant is to undertake the Secretary's duties for another six months from 1st May.

The Commissioners' Draft Ordinance [General No. 34—Regulations with regard to Matriculated Students] was remitted to the Draft Ordinances Committee.

It was intimated that the Commissioners' Ordinances, Nos. 118 to 129 inclusive—Regulations for various Bursary, &c., Foundations, had been laid before Parliament.

The Court appointed Sir A. C. Mackenzie, Principal of the Royal Academy of Music, London, Additional Examiner in Music for the current academical year.

A report was submitted from the Senatus intimating that the privi-

lege conferred by Ordinance No. 11, section xxii., had been granted to a woman student.

On the recommendation of the Senatus, the Court sanctioned the delivery of a special course of twenty lectures on "The development of Mediæval Architectural Styles in Britain from the 11th to the 16th Centuries," by Mr S. Henbest Capper, M.A., A.R.I.B.A., during next summer session on Tuesdays and Thursdays, at 5 P.M., beginning on Thursday, May 9th; fee, £1, 1s., with University Entrance Fee of five shillings.

On the recommendation of the Senatus, the Court granted permission to Dr Sarolea, Lecturer in French, to give, during next winter session, a course of fifty lectures, of the honours standard, on Italian Language and Literature; fee, £3, 3s.

The Court fixed the fee for the Course in Sanitary Engineering and Building Construction at £2, 2s., instead of £3, 3s. as before, when Drawing was included in the Course; and fixed the fee for the Course of Drawing qualifying for Graduation in Public Health at £2, 2s.

The Court further resolved to charge £2, 2s. for the Course on the Zoology of the Invertebrata, to be delivered during the summer session by Professor Cossar Ewart; and £3, 3s. for the Course of Advanced Zoology (*i.e.*, twenty-five lectures on the Comparative Morphology of the Invertebrata, to be delivered by the Professor, and the three months' Laboratory Course).

The Court, having considered Applications for Recognition from the University College, Dundee, and the Dundee Royal Infirmary, resolved, under the powers conferred by Ordinance No. 16, section viii., 2, and in view of the recent decision of the House of Lords, to provisionally recognise the University College, Dundee, as a School, the medical classes in which shall qualify for Graduation in Medicine; and also under Ordinance No. 18, section iii., 4, as a Medical School in which women can obtain instruction qualifying for Graduation in Medicine. The Court further resolved to provisionally recognise the Royal Infirmary, Dundee, under Ordinance No. 16, section vii., 5 and 10.

The Court passed various accounts, &c., for payment, and approved of certain additions to the furnishings of the class-rooms, &c.

Appendix.

I.—UNIVERSITY LOCAL EXAMINATIONS.

The BOARD grant Certificates of two grades, viz., JUNIOR and SENIOR, the Examinations for which are as nearly as possible on the same level as the Government Lower and Higher Grade Examinations.

The subjects of examination are divided into three classes—PRELIMINARY SUBJECTS, SPECIAL SUBJECTS, and EXTRA SUBJECTS.

The Preliminary subjects, in which *all* Candidates must undergo Examination, are—(1) English, (2) History and Geography, (3) Latin (optional for girls), (4) Arithmetic, (5) Scripture History *or* French Grammar.

Candidates who have passed the Sixth Standard (Education Code) and the second stage of two specific subjects, of which one at least is a foreign language, are exempted from the Preliminary Examination. For a list of Certificates, granted by other Examining Boards, which exempt Candidates from this Examination, see the *Regulations* published by the Board.

The Special subjects are—(1) for JUNIOR CERTIFICATES: Department A.—Latin, Greek, French, German. B.—English, History, Geography, Scripture History. C.—Mathematics, Natural Philosophy, Physical Geography. (2) For SENIOR CERTIFICATE: A.—(as above), B.—English, History, Geography, Logic, Bible Knowledge. C.—Mathematics, Natural Philosophy. D.—Chemistry, Zoology, Botany, Physiology, Geology. E. (Commercial Certificate)—Arithmetic, Commercial History and Geography, Elements of Economics, and either French or German. Candidates for Junior and Senior Certificates must take *three* or *four* subjects,—the former selecting from at least *two* of the Departments A, B, and C, the latter from at least *two* of the Departments A, B, C, and D. One of the subjects must be chosen from Department A. The History and Geography papers are subject to special conditions, for which see *Regulations*. In Department E all the subjects must be taken before a Special Certificate is granted.

The Extra Subjects (optional) for both Certificates are Drawing and Music.

These Examinations have been instituted to supply a common test of attainment both for pupils of public schools and for those privately

educated. They are held annually, early in June, at various local centres in Scotland, England, and Ireland, and also abroad. There is no restriction as to age.

Candidates may offer themselves for Examination in the Preliminary Subjects alone, and afterwards for the Special and Extra Subjects of the Junior or Senior Certificate; or, they may take the Preliminary, Special, and Extra Subjects, for either Certificate, at one Examination. They may afterwards add to the value of the Certificate by taking two or more subjects. A number of Bursaries are offered in connection with these Examinations.

PRIVILEGES ATTACHING TO THE CERTIFICATES.

1. The Junior and Senior Certificates exempt from the Medical Preliminary Examinations, so far as the requirements of the General Medical Council are concerned, if all the subjects required by the Council are taken at one and the same examination.[1]

2. Girls who hold the Senior Certificate are exempted from the Entrance Examination for Girton College, Cambridge.

3. Holders of the Senior Certificate above eighteen years of age are recognised as Assistants in State-aided schools.

The Board publishes a Report of the Examinations annually, containing copies of the Examination papers, lists of the successful Candidates, and Regulations for the following year. Copies of the Regulations, &c., may be had on application to the Clerk of Senatus.

H. CALDERWOOD, LL.D., *Secretary.*
G. GREGORY SMITH, M.A., *Assistant Secretary.*

II.—CIVIL SERVICE OF INDIA EXAMINATIONS.

The University of Edinburgh now being one of those Institutions selected by the Secretary of State for India, in which Candidates for the Civil Service of India may pass their probation, arrangements have been made by the Senatus for the accommodation of selected candidates. Such selected candidates will be under the supervision of the Principal and Deans' Committee.

Persons desirous to be admitted as Candidates may obtain all necessary information from "The Secretary, Civil Service Commission, London, S.W.," who will supply forms of application at any time after the 1st December for the Examination following. The forms must be returned on or before 31st March.

[1] The Certificates are not now accepted by the Scottish Universities. (See Regulations of Joint Board of Examiners.)

Candidates may be exempted from the Preliminary Examination in all subjects except geometrical drawing, if they can produce a certificate of having passed the Preliminary Examination in general education required of Candidates for graduation in Medicine at the University of Edinburgh, when the Candidate has passed in all the subjects of the Army Preliminary Examination at not more than two Examinations.

III.—EXAMINATIONS FOR CANDIDATES FOR THE ARMY.

In the Explanatory Memorandum of the Secretary for War, to accompany the Royal Warrant (of 30th October 1871) regulating first appointments, regimental promotion, &c., in the Army, it was announced that "A certain number of Sub-Lieutenancies a year will be allotted to Candidates who have passed the University Examination specified in the Regulations. If they also pass the Examination for the degree of B.A., they will be allowed two years' extension of the limit of age. University Candidates will be required to give at least six months' notice of their desire to be admitted into the Army. If in any year there should be more Candidates than appointments, the requisite number will be chosen by competition between the Candidates; after their appointment they will go through the same course as other Sub-Lieutenants."

In subsequent communications from the War Office it has been announced that "The Examination for M.A. at a Scottish University will be considered tantamount to passing that of B.A. at an English or Irish University;" and that "the Secretary of State for War has accepted an examination at the Scottish Universities, to be defined as 'The Examination for Candidates for the Army,' as equivalent to the examination at the English and Irish Universities for similar candidates, and that the age of such candidates may be extended to 21 years. This Examination will consist of one subject out of each of the three separate Departments marked (*a*) (*b*) (*c*) below."

In conformity with the above Regulations of the War Office—1st, All who have passed the Examination for the degree of M.A. will be eligible for Commissions in the Army, and will be allowed two years' extension of the ordinary limit of age. 2nd, Those Students who have not passed the M.A. Examination may receive Certificates qualifying them for Commissions in the Army (provided they be not more than 21 years of age) on having attended one class in each of the three Departments (*a*) (*b*) (*c*)—that is to say (*a*) either one Greek or one Latin class; (*b*) either Logic, Moral Philosophy, or Rhetoric and English Literature; (*c*) either Mathematics or Natural Philosophy,—and on passing the M.A. Examination, in either April or October, in those three subjects in which the Candidate has attended classes.[1] Candidates for the

[1] See Regulations for Degree of M.A.

Certificate are not required to pass the Preliminary Examination, but unless the Candidate has passed the Preliminary Examination, the Certificate will not qualify for Graduation in Arts.

The names of intending Candidates for Certificates must be given in and Fees paid at the *Matriculation Office* at the same time as those of Candidates for the M.A. Examinations.

The Fee for the Examination is two guineas.

IV.—SYLLABUS OF SUBJECTS OF EXAMINATION FOR STUDENTS OF DIVINITY AND CANDIDATES FOR LICENCE BY PRESBYTERY OF EDINBURGH.

*** *The Examinations shall be conducted mainly in writing.*

An average of not less than 40 *per cent. over all the subjects, and a minimum of* 30 *per cent. in each shall be necessary to a pass, except in Biblical Knowledge, in which* 50 *per cent. shall be the minimum.*

The Examinations, by the favour of the Senatus, will be held in the Examination Hall of the University.

I.—FOR STUDENTS ENTERING THE DIVINITY HALL.

1. BIBLICAL KNOWLEDGE.—Genesis to 2 Samuel, and the Four Gospels.
2. THE SHORTER CATECHISM.

II.—FOR STUDENTS ENTERING UPON THEIR SECOND YEAR.

1. LATIN.—Augustine—Enchiridion.
2. GREEK.—The Epistle to the Colossians as in Lightfoot.
3. HEBREW.—Davidson's Grammar, 1-31; Genesis, i.-ix.
4. DIVINITY.—Confession of Faith, 1-15; Flint's Theism; Row's Manual of Christian Evidences.
5. BIBLICAL KNOWLEDGE.—1 Kings to Nehemiah, and Acts of the Apostles.
6. CHURCH HISTORY.—History of the Church to 325 A.D.

III.—FOR STUDENTS ENTERING UPON THEIR THIRD YEAR.

1. LATIN.—Anselm—Cur Deus Homo.
2. GREEK.—St John's Gospel to be read critically, with discussions as to date and authorship.
3. HEBREW.—Davidson's Grammar, 32-49; Psalms i.-xv.
4. DIVINITY.—Confession of Faith, 16-33; The Trinity; The Person of Christ.

5. Biblical Knowledge.—The Mosaic Ritual and the Prophets.
6. Church History.—The Reformation Period, with special r ference to Scotland.

iv.—For Candidates for Licence.

By Act of Assembly VII., 1894, it is enacted that the Presbytery shall test the Student's knowledge of the Old and New Testaments, and of the history and doctrine of the recognised Standards of the Church of Scotland. He shall also deliver a popular discourse on some text different from any prescribed to him at the Divinity Hall.

N.B.—By Act of Assembly XX., 1889, all Students of Theology who have completed the prescribed course of Theological instruction shall, before applying to any Presbytery to be taken on trials for licence, be examined by the Synodical Committees already existing for examination of Students entering the Divinity Hall. The Convener of the Edinburgh Synodical Committee is the Rev. Dr Alison, who will give the necessary information.

V.—THE EDINBURGH UNIVERSITY UNION.

President—S. J. Aarons. *Hon. Secretary*—James G. C. Scott.
Treasurer—W. A. Wood, C.A., 45 Queen Street.

Committee of Management—*Senatus*—Professors Butcher and Annandale. *General Council*—Dr J. Musgrove, Dr J. G. Cattanach, Mr C. W. Cathcart, J. A. Clyde, LL.B. *Students*—W. J. Garbutt, A. MacCarthy Morrogh, J. W. Tullo, D. Waterston, R. D. Melville, R. D. Story.

The Union is open to all Students and Graduates of the University, and its purpose is "the provision and maintenance of means of social and academic intercourse for its members." The Building, which includes a large hall (in which the debates are held), luncheon, smoking, reading-rooms, and billiard-room, is situated in Park Street, near both the old and the new buildings. The reading-room is amply supplied with newspapers, and with the weekly, monthly, and quarterly periodicals; the billiard-room is furnished with two billiard tables, and the library contains University, Class, Text, and Reference Books.

Terms of Membership.—By payment of an entry-money of 5s. and an Annual Subscription of 10s. 6d. if a Matriculated Student, or £1, 1s. if a Graduate, University Assistant, or Lecturer.

Affiliated Societies.

The Edinburgh University Union Dramatic Society.
University of Edinburgh Union Literary Society.
E. U. Union English Public Schools Club.
The following University Societies and Associations, though not

affiliated with the Union, have been granted certain privileges for the transaction of Business in the Union:—Students' Representative Council, Athletic Club, Conservative Association, Liberal Association, Chemical Society, Musical Society, and Darwinian Society.

Full particulars as to affiliation, &c., on application at the Union.

VI.—STATISTICS OF THE RECTORIAL ELECTIONS IN THE UNIVERSITY OF EDINBURGH, 1859-1893.

1859.—*Gladstone*, 642.—*Neaves*, 527. Matriculated students, 1302.
1862.—*Gladstone* (*unopposed*). Matriculated students, 1331.
1865.—*Carlyle*, 657.—*Disraeli*, 310. Matriculated students, 1288.
1868.—*Moncreiff*, 607.—*Ruskin*, 425. Matriculated students, 1398.
1871.—*Maxwell*, 594.—*R. Palmer*, 502. Matriculated students, 1533.
1874.—*Derby*, 770.—*Playfair*, 583. Matriculated students, 1767.
1877.—*Hartington*, 932.—*Cross*, 684. Matriculated students, 2102.
1880.—*Rosebery*, 1024.—*Christison*, 985. Matriculated students, 2496.
1883.—*Northcote*—*Blackie*—*Trevelyan*. Matriculated students, 2660.
1886.—*Iddesleigh*, 1094.—*Playfair*, 747. Matriculated students, 2680.
1887.—*Lothian* (*unopposed*). Matriculated students, 2493.
1890.—*Goschen*, 1378.—*Russell*, 805. Matriculated students, 3038.
1893.—*Robertson*, 1145.—*Reay*, 728. Matriculated students, 2649.

VII.—ROYAL MEDICAL SOCIETY, EDINBURGH.

7 MELBOURNE PLACE.

FOUNDED 1737. ROYAL CHARTER GRANTED 1778.

Presidents—John Orr, M.B., C.M., M.R.C.S., M.R.C.P., Ed.; J. Purves Stewart, M.A., M.B., C.M., M.R.C.S.; C. C. Easterbrook, M.A., M.B., C.M.; Jas. G. Cattanach, M.B., C.M. *Secretaries*—W. Macrae Taylor; Kenneth MacLean. *Treasurer*—J. R. Young, Esq. *Sub-Librarian*—A. P. Ormiston.

The Society meets in its hall every Friday evening during the Winter at 9 o'clock. At these meetings dissertations on medical subjects are read and debated, and communications by members on subjects of interest discussed. The Society possesses a very fine library, containing about 30,000 volumes, which is constantly being added to. There are comfortable writing and reading-rooms with all the medical journals and periodicals, books of reference and text-books specially useful to students reading for examinations. The museum contains a complete collection of Materia Medica specimens, microscopic sections, pathological preparations, herbarium, and a surgical model, on which bandaging, setting of fractures, &c., may be practised.

VIII.—INTERNATIONAL-ACADEMIC COMMITTEE.

The Principal and Deans' Committee of the Senatus and the International Academic Committee of the Students' Representative Council are prepared to give all the assistance and information in their power to Foreigners desirous of studying in the University of Edinburgh, and to Edinburgh University Students desirous of studying in foreign universities. Inquiries may be addressed in writing to the Secretary of Senatus, or to Dr J. G. Cattanach, 3 Alvanley Terrace, member of the International-Academic Committee.

IX.—ASSOCIATION FOR THE BETTER ENDOWMENT OF THE UNIVERSITY OF EDINBURGH.

President—The Right Hon. Arthur James Balfour, D.C.L., LL.D., M.P., Chancellor of the University. *Vice-Presidents* — The Right Hon. The Earl of Wemyss, LL.D.; The Right Hon. The Earl of Stair, K.T.; The Right Hon. The Earl of Rosebery, K.G., LL.D.; Sir James Gardiner Baird, Bart.; Principal Sir William Muir, K.C.S.I., D.C.L., LL.D.

Ordinary Members of the General Committee—The Right Hon. John B. Balfour, Q.C., LL.D., M.P., Lord Advocate; R. Fitzroy Bell, Esq., Advocate; A. W. Black, Esq.; John Boyd, Esq.; Sir Thomas J. Boyd; Professor Butcher, LL.D.; Rev. Professor Calderwood, LL.D.; John Carment, Esq., LL.D., S.S.C.; Professor Chiene, F.R.C.S.E.; D. Christison, Esq., M.D.; The Hon. Lord Rutherfurd Clark, LL.D.; Sir Thomas Clark, Bart.; Archibald Constable, Esq.; Henry Cook, Esq., W.S.; Charles Cook, Esq., W.S.; R. Cameron Cowan, Esq., C.A.; Donald Crawford, Esq., M.P., Advocate; The Hon. Lord Stormonth Darling, LL.D.; John Duncan, Esq., M.D.; J. R. Findlay, Esq.; The Rev. Archibald Fleming; John Harrison, Esq.; James Hope, Esq., W.S.; A. Taylor Innes, Esq., Advocate; The Hon. Lord Kinnear, LL.D.; E. J. G. Mackay, Esq., LL.D., Advocate, Sheriff of Fife; The Hon. Bouverie F. Primrose, C.B.; Charles Robertson, Esq., B.C.S.; Professor Seth, LL.D.; Robert Simson, Esq., B.C.S.; George Smith, Esq., LL.D., C.I.E.; James Walker, Esq. of Dalry. *Hon. Secretary*—Sir Alexander Christison, Bart., M.D. *Secretary*—Robert G. Scott, W.S., 61 North Castle Street.

Local Honorary Secretaries—A. Mercer Adam, Esq., M.D., Boston, Lincolnshire; Sir Dyce Duckworth, M.D., 11 Grafton Street, Piccadilly, London; Peter Gardner, Esq., W.S., 153 St Vincent Street, Glasgow; A. F. Hutchison, Esq., Stirling; James Tait, Esq., W.S., Kelso.

Terms of Membership—Life Subscription, Ten Guineas; Annual Subscription, One Guinea. Subscriptions and Donations in excess of these Sums are earnestly solicited by the Committee.

X.—UNIVERSITY OF EDINBURGH BUILDINGS EXTENSION SCHEME.

At a Meeting of the Acting Committee for this Scheme, held on 16th November 1885, it was resolved to apply to Parliament for power to acquire houses in Park Street adjoining the present New Buildings as a site upon which to erect a University Hall; and under the Edinburgh University Buildings Extension Act, 1886, certain Members of the Committee were incorporated as Trustees by the name of the EDINBURGH UNIVERSITY BUILDINGS EXTENSION TRUSTEES, for the purpose of acquiring the property in question and erecting the Hall.

The present Trustees are :—

Principal Sir W. MUIR, K.C.S.I., D.C.L.
WILLIAM M'EWAN, Esq., M.P.
Professor Sir WILLIAM TURNER, D.C.L.

Mr M'Ewan munificently offered to contribute the sum required to erect the Hall as originally contemplated, and in completion of the architect's design, upon condition of the cost of the site being provided otherwise. The Government was approached on the subject, and a Parliamentary grant of £8000 towards the cost of the site was obtained. Mr M'Ewan having provided the balance required, the site was purchased. Plans for the erection of the Hall by R. Rowand Anderson, LL.D., Architect, were approved of and contracts entered into, and the work is now approaching completion. By resolution of the Senatus Academicus, the new Hall will be named the "M'Ewan Hall," in grateful recognition of the founder's benefaction.

GEORGE SOMERVILLE, City Chambers,
Clerk to Trustees.

XI.—UNIVERSITY SOCIETIES AND CLUBS.

i.—THE AGRICULTURAL SOCIETY.

ESTABLISHED 1858.

Honorary President—Dr A. Peebles Aitken. *President*—H. W. Stone. *Vice-President*—A. Allsebrook. *Secretary*—W. Bruce. *Treasurer*—G. Malthouse. *Committee*—Messrs Cuthbert, Naismith, and Fraser.

This Society meets weekly on Mondays during the Winter Session at 7.30 P.M.

ii.—ARTS STUDENTS' CHRISTIAN ASSOCIATION.

Hon. President—The Rev Alexander Whyte, D.D. *Hon. Vice-Presidents*—Professor Butcher, LL.D.; Professor Calderwood, LL.D.; Professor M. Dods, D.D.; Rev. Alex. Martin, M.A.; Rev. James Durran, M.A.; Dr A. H. F. Barbour, M.A.; Rev. Wallace Williamson, M.A. *President*—P. Laurence K. Mudie. *Secretary*—A. Scott Ballantyne, The University. *Treasurer*—(pro temp.)—J. A. Glover, 6 South Oxford Street.

The objects of the Association are—(1) To form a bond of union between men whose principle and aim in life is Christian; (2) To promote social intercourse; (3) To give University men an opportunity of engaging in Christian work.

(Women's Branch).

Honorary President—Miss Louisa Stevenson. *President*—Miss Nairn, M.A. *Vice-Presidents*—Miss Dods and Miss J. Balfour Ellis, L.R.A.M. *Secretary*—Miss Lorimer, 9 Gloucester Place. *Treasurer*—Miss Sutherland, 30 Warriston Crescent. *Committee*—Misses L. Graham, E. C. Gray, H. Macfie, C. Tweedie, A. Macdonald, E. M. Milligan, in addition to the office bearers *ex-officio*.

The work is carried on by means of a weekly meeting for Bible study and other religious and social meetings. Membership is open to all women students, present and past, of the University of Edinburgh, the annual subscription being one shilling.

iii.—ASSOCIATED SOCIETIES OF THE UNIVERSITY.

This Association was instituted in 1833, and is a Union of Literary and Debating Societies. It is composed at the present date of five societies:—The Dialectic, Scots Law, Diagnostic, Philomathic, and Celtic Societies. The following is the list of the Office-Bearers of the Association, and of the respective component societies:—

Honorary President—Professor David Masson, LL.D. *Hon. Vice-Presidents*—The Senatus Academicus of the University (*ex officiis*). *Secretary*—John D. Robson, M.A., 87 Gilmore Place.

(1.) DIALECTIC SOCIETY.

Instituted in 1787.

Presidents—A. Rutherford Howell, M.A.; A. Elliot Keay; D. Nichol Smith; J. W. Tullo, B.Sc.; W. R. Henderson, M.A. *Secretary*—John A. Robson, M.A. *Treasurer*—C. C. Watson.

This Society meets in the Societies' Hall every Thursday Evening at 8 o'clock, for the prosecution of Literary and Philosophical Composition, Criticism, and Debate.

(2.) SCOTS LAW SOCIETY.

INSTITUTED IN 1815.

Presidents—Robert Macdougald, B.L., Solicitor, 22 London Street; John Clark, Solicitor, 2 Bellevue Terrace; Robert Munro, M.A., LL.B., Advocate, 22 India Street. *Secretary*—A. N. Stephenson, Solicitor, 48 India Street. *Assistant-Secretary*—Douglas M. Gibson, 84 Great King Street. *Treasurer and Librarian*—J. Erskine Dods, M.A., 1 London Street.

This Society meets every Monday Evening during the Winter Session, at 8.30 o'clock, for the purpose of debating and reading Essays.

(3.) THE DIAGNOSTIC SOCIETY.

INSTITUTED IN 1816.

Presidents—A. S. Fraser, B. Bell, H. J. Boyd, A. G. Ferguson. *Secretary*—A. Patrick Smith. *Treasurer*—T. J. G. Gardiner.

This Society meets every Tuesday Evening during the Winter Session, at 9 o'clock, in the Associated Societies' Hall, for the purpose of debating and reading Essays.

(4.) PHILOMATHIC SOCIETY.

INSTITUTED IN 1858.

Presidents—J. W. Hamilton Smith, E. F. Gibson, M.A.; and R. Y. Whitton. *Secretary*—G. Claus Rankin. *Assistant-Secretary*—J. S. Macdonald. *Treasurer*—T. Maclagan.

This Society meets in the Societies' Hall every Friday evening during the Winter Session, at 8 P.M., for the purposes of debate and essay-reading; and is open to all who are, or have been, Matriculated Students of the University of Edinburgh.

(5.) CELTIC SOCIETY.

INSTITUTED 1848.

Honorary President—Professor MacKinnon. *Presidents*—James Tolmie, M.A.; David Duncan; Malcolm MacInnes, M.A. *Secretary*—James D. MacDonald. *Assistant-Secretary*—T. S. MacPherson. *Treasurer*—J. N. Jack.

This Society meets in the Societies' Hall every Saturday evening during the Winter Session, at 7 P.M., for debating and reading Essays. Literary business conducted in Gaelic three nights in the Session.

iv.—ATHLETIC CLUB.

President—J. G. C. Scott. *Vice-President*—S. J. Aarons. *Treasurer*—C. E. W. Macpherson. *Hon. Secretary*—C. MacLaurin, the University Union, Park Place.

Open to all Members and Graduates of the University, and to Students of the Extra-Mural School. The *sections* of the Club are—

1. FOOTBALL (Rugby)—*Secretary*—A. Wood. (Association)—*Secretary*—N. MacGowan. 2. CRICKET—*Secretary*—H. Malins. 3. CYCLING—*Secretary*—A. D. Grange. 4. LAWN TENNIS—*Secretary*— 5. SWIMMING—*Secretary*— 6. HARE AND HOUNDS—*Secretary*—J. Edwards. 7. GOLF (affiliated)—*Secretary*—R. J. Bryce. 8. ROWING—*Secretary*—W. G. Currie.

Field at Corstorphine. Address all communications to *Sec.*, University Union.

v.—CAITHNESS STUDENTS' ASSOCIATION.

INSTITUTED IN 1837.

Honorary President—His Grace the Duke of Portland. *President*—David Reid. *Secretary*—Walter Murray. *Treasurer*—David Sutherland. *Joint Competition Committee*—J. B. Meiklejohn, J. Gregory Nicolson, and D. B. Waters.

This Association meets fortnightly, in the Education Class Room, on Saturdays, at 8 P.M., during the Winter Session, for the purpose of debating: for reading Essays, and for the advancement of education in Caithness.

vi.—CHEMICAL SOCIETY.

INSTITUTED 1874.

President—Professor A. Crum Brown, M.D., D.Sc. *Vice-Presidents*—Leonard Dobbin, Ph.D.; Hugh Marshall, D.Sc. *Librarian*—A. Forbes Watson, B.Sc. *Joint Secretaries*—J. C. Gregory; J. P. Longstaff. *Treasurer*—Longfield Smith.

This Society holds fortnightly meetings, at 8 P.M., in the Committee Room of University Union, during the Winter Session, for the reading and discussion of papers on Chemistry and allied Sciences.

Excursions to Chemical Works, &c., during the Sessions.

vii.—DARWINIAN SOCIETY.

(*Names of Office-Bearers not communicated.*)

The Society meets every alternate Wednesday evening, at 8 P.M., in the Hall of the University Union, and is open to all who are, or have been, Matriculated Students of this University.

viii.—DUMFRIESSHIRE AND GALLOWAY LITERARY SOCIETY.

INSTITUTED 1847.

Presidents—Thomas M. Agnew, R. W. Mackenna, John Ritchie, G. C. Kirk. *Secretaries*—Wm. Murray, 107 Marchmont Road; J. Ewing Gibson, 1 Roseneath Terrace. *Treasurer*—P. M'Murray, 8 Blackwood Crescent.

The Society meets every Saturday evening during the Winter Session, at 7 o'clock, in the Public Law Class-Room.

ix.—FREE CHURCH SOCIETY.

INSTITUTED 1886.

Honorary President—Professor Prothero, D.Litt. *President*—Mr Lennox Fraser. *Vice-Presidents*—Mr D. Cameron, Mr A. J. Baird. *Secretary*—Mr A. S. Crichton. *Assistant-Secretary*—Mr D. H. MacGregor. *Treasurer*—Mr W. A. Guthrie.

This Society meets every Saturday evening during the Winter Session, at 7 o'clock, in Dr Moxey's Class-Room, F.C. College, Mound, for the purpose of debating and reading Essays.

x.—MEDICAL STUDENTS' CHRISTIAN ASSOCIATION.

Honorary President—Mr A. G. Miller, F.R.C.S.E. *Honorary Vice-Presidents*—Professors Crum Brown, M.D.; Greenfield, M.D.; Sir D. Maclagan, M.D.; A. R. Simpson, M.D.; Sir T. Grainger Stewart, M.D.; Dr J. Affleck; Dr J. W. Ballantyne; Dr A. H. F. Barbour; Mr C. W. Catheart, F.R.C.S.; Dr Robt. Fleming; Mr J. Shaw M'Laren, F.R.C.S.E. *President*—J. E. Bowes, 3 Livingstone Place. *General Secretaries*—B. L. Livingstone-Learmonth, 45 Marchmont Road; J. Rutter Williamson, 93 Warrender Park Road. *Ward Service Secretaries*—S. H. Carr, 45 Marchmont Road; H. T. Holland, 1 Roseneath Place. *Ward Library Secretary*—H. Nuttall, 75 Warrender Park Road. *Treasurer*—D. M. Mackay, 14 Panmure Place.

The object of the Association is, stated briefly, to form a bond of union between Medical Students whose *principles and aims in life* are Christian. Membership is open to both University and College of Surgeons Students. A half-hour meeting, to which *all* Medical Students are invited, is held each Sunday during Session from 10 to 10.30 A.M. in the Chapel of Royal Infirmary, and is conducted by various medical men and Senior Students. There is a Missionary Library open to all matriculated Students. The Secretaries will be glad to give full information as to the work of the Society, and to enrol any who wish to become members.

xi.—MISSIONARY ASSOCIATION.

INSTITUTED 1825.

Honorary President—Principal Sir W. Muir, K.C.S.I., D.C.L. *Hon. Vice-Presidents*—The Lord Rector, Right Hon. J. P. B. Robertson; Rev. Professor Calderwood; Professor Butcher; and Rev. Dr Nicol, B.D. *Chairman of Workers' Meeting*—Rev. Dr Nicol. *President*—Hugh P. Reid. *Vice-President*—Walter R. Henderson, M.A. *Secretary*—E. J. Mitchell. *Assistant Secretary*—J. Wallace, M.A. *Treasurer*—W. Melville Sym, Esq., C.A. *Assistant Treasurer*—J. R. Murdoch. *Librarian*—Murray Corson, M.A. *Vice-Librarian*—Donald Munro, M.A.

The Association meets to transact business in the Public Law Class-Room on alternate Saturdays, at 10 A.M.

xii.—MUSICAL SOCIETY.

ESTABLISHED 1867.

Patron—H.R.H. The Reigning Duke of Saxe-Coburg and Gotha (The Duke of Edinburgh).

President—Professor Niecks. *Vice-Presidents*—Principal Sir W. Muir, K.C.S.I.; Professors Annandale, Armstrong, Butcher, Calderwood, Crum Brown, Flint, Kirkpatrick, Maclagan, Rutherford, Seth, Emeritus-Professor Sir Herbert S. Oakeley; D. Hepburn, M.D.; and Macdonald Brown, M.B. *Hon. or Corresponding Vice-Presidents*—The President of Aberdeen University Musical Society and Professor Prout, Dublin; Professor Sir John Stainer, Oxford; Professor Villiers Stamford, Cambridge. *Hon. Secretary and Treasurer*—W. C. Sillar, M.B. *Conductor*—Mr Carl D. Hamilton.

Weekly practice, during the Winter Session, in the Hall of the University Union. Day and hour subject to arrangement at the general meeting held at the beginning of the Winter Session.

xiii.—PHYSICAL SOCIETY.

Presidents—J. B. Clark, M.A.; J. Craig, M.A. *Secretary and Treasurer*—Alex. Shand, Physical Laboratory.

This Society meets every second Wednesday during the Session, at 7.30 P.M., for the discussion of subjects connected with Mathematical and Experimental Physics.

xiv.—PHOTOGRAPHIC SOCIETY.

Honorary President—Professor A. Crum Brown. *President*—Dr Thomas Drinkwater. *Vice-President*—Dr Logan Turner. *Secretary and Treasurer*—Mr H. Overton Hobson, The Union.

All past and present Students eligible. Dark-rooms, Studio, &c., at 3 Bristo Place, free to Members at any time. Monthly meetings during sessions. Excursions in summer time.

xv.—RIFLE COMPANY SHOOTING CLUB.

INSTITUTED 1873.

Honorary President—Lieut.-Col. Sir Wm. Turner. *President*—Captain I. B. Balfour. *Vice-Presidents*—Lieutenants J. A. Hope and E. H. Robertson. *Secretary and Treasurer*—Sergeant Gavin Grey. *Committee*—Col.-Sergeant A. R. Wilson; Sergeant C. W. Peach; Corporal J. B. Jamieson; Privates J. A. Thomson and A. A. Macleod.

This Club is open to members of No. 4 (University) Co., Q.R.V.B.R.S. The Club superintends the shooting of the Company. Weekly competitions are held at Hunter's Bog, and an Annual Prize Competition in July, at which numerous prizes are given. A silver teaspoon is given for each weekly competition.

xvi.—SHINTY CLUB.

Patrons—Lord Robertson, Lord Rector of the University; Lord Reay; Lewis M'Iver, Esq.; Viscount de Serra Largo; Dr M'Gregor, M.P., Inverness-shire; Rev. Dr Blair, of St John's, Edinburgh. *President*— . *Vice-President*—Professor M'Kinnon. *Captain*—R. W. Meikle. *Vice-Captain*—J. A. Macdonald, M.A. *Hon. Secretary and Treasurer*—A. J. Mackenzie, 14 Westhall Gardens.

Membership is open to all past and present Students of the University. Practice at Inverleith Park on Saturday afternoons during Winter Session.

xvii.—THEOLOGICAL SOCIETY.

INSTITUTED 1776.

Honorary President—Rev. Professor Flint, LL.D. *Honorary Vice-Presidents*—Rev. Professor Charteris, D.D.; Rev. Professor Taylor, D.D.; Rev. Professor Kennedy, D.D. *Presidents*—Walter R. Henderson, M.A.; H. M. Lamont, M.A.; Wellwood M. Landale, M.A.; Thomas O. Duncan. *Secretary*—R. G. Jamieson, M.A. *Treasurer*—W. W. Reid, M.A.

This Society is open to present and past Students of any Theological Seminary. It meets every Friday evening during the Winter Session, at 8.30 P.M., for debates and discussions on questions of Theology, Church History, Biblical Criticism, General Ecclesiastical Polity, and kindred subjects.

xviii.—UNIVERSITY BATTERY, E.C.V. ARTILLERY.

Captain—Professor J. C. Ewart. *Lieutenant*—I. Coates. *Sergeant-Major*—H. O. Hobson. *Sergeants*—C. J. Caddick, T. D. Lamond, R. Craven. *Hon. Secretary and Treasurer*—Corporal J. R. Lord, University Union.

The Battery is recruited from the University and the Extra-mural School only. During the summer numerous competitions are held : in the Battery, Carbine Shooting and a competition in drill and firing with field-guns by subdivisions for the Challenge Shield ; in the Brigade, Carbine Shooting, Field-gun Shooting, and Repository Competitions ; and, inter-regimentally, numerous prizes are offered by the Scottish National Artillery Association at Barry Camp for Shooting, Drill and Repository work with field-guns, including the Waveney Cup and the Queen's Prize.

Further information may be obtained from any of the above-named N.C.O's, or at Headquarters, 31 St James' Square.

xix.—UNIVERSITY HALL.

2 Mound Place and Riddle's Court (5 Victoria Terrace).

Founded May 1887.

University Hall is designed as a social residence for Students, Graduates, and others connected with the University. Begun in 1887 at Mound Place, it has since been extended to Riddle's Court, and now also to Ramsay Garden and Ramsay Lodge. These buildings are within short distances of the University, and include common rooms, private studies, and bedrooms. The rents range from 8s. to 18s. per week, and the board from 12s. to 14s. per week, payable by term or weekly.

The external affairs of the Hall are in the hands of Professor Geddes, with the assistance of the following Consulting Committee :—Lord Stormonth-Darling ; Professors Butcher, Chiene, Kirkpatrick, Crum Brown, Geddes ; Æneas Mackay, Esq., LL.D.; R. Fitzroy Bell, Esq.; W. K. Dickson, Esq. ; Dr George Mackay, Dr Hunter Stewart, James Macdonald, Esq. ; R. C. Gray, Esq., S.S.C. ; J. F. Mackay, Esq., W.S. ; Dr Caird, J. Arthur Thomson, Esq., M.A., and three representatives from those in residence. Riccardo Stephens, M.B. is Secretary of this Committee.

The internal arrangements of each house are, in most cases, managed by a committee of the residents elected monthly. When desired, young Students can be placed under the care of one of the resident tutors, the Rev. H. H. Flower, Pittodrie House, Ramsay Gardens, J. A. Thomson, Esq., M.A.; Riccardo Stephens, M.B., and others, and

in some of the chambers and larger houses occupied by teachers, graduates, &c., Students can be received as pupils and boarders.

Application for rooms should be made at the different houses. Application for information with regard to general questions on University Hall can be made to Riccardo Stephens, M.B., Ramsay Lodge, or to Messrs Whitson & Methuen, C.A., 26 Hill Street, Edinburgh.

xx.—CRUDELIUS UNIVERSITY HALL.

(For Lady Students.)

Burns's Land, 457 Lawnmarket, Edinburgh.

Inaugurated 15th and 16th June 1894.

The rents vary from 6s. 6d. to 10s. 6d. per week, including the use of the common sitting-room, light, service, &c. ; and the cost of board is about 9s. per week.

Executive Committee.—Professor Kirkpatrick (Chairman), Mrs Baldwin Brown, Mrs G. Wardlaw Burnet, Rev. E. C. Dawson, Miss M'Lean, Principal Grant Ogilvie, Two Representatives elected by the Residents, and the Hon. Secretary, *ex officio.*

For particulars apply to the Hon. Secretary, Mrs Salmon, 8 Ramsay Garden, Edinburgh.

xxi.—UNIVERSITY U.P. STUDENTS' SOCIETY.

Instituted 1843.

Honorary Presidents—Professor Crum Brown, M.D., LL.D. ; Rev. Professor Henry Calderwood, LL.D. ; Rev. John Hutchison, D.D. ; Rev. A. B. Cameron, D.D. *President*—David M. Aitken. *Vice-Presidents*—James G. Burns, Robert Whyte. *Secretary*—Robert Gray. *Treasurer*—William H. Sellar.

The Society meets every Saturday evening during the Winter Session, in the College Buildings, Castle Terrace, at Seven o'clock.

xxii.—WOMEN'S DEBATING SOCIETY.

Instituted 1893.

President—Annie C. Sutherland. *Vice-President*—Lilias A. Johnstone. *Secretary*—Helen Macfie, 1 Glengyle Terrace. *Treasurer*—Mary C. Dods.

The Society meets every Friday during the Winter Session, at 5 P.M., within the University, for Debate and Literary Criticism.

XII.—ORDINANCES OF THE COMMISSIONERS UNDER THE UNIVERSITIES (SCOTLAND) ACT, 1889, WHICH WILL COME INTO FORCE BEFORE THE COMMENCEMENT OF THE ACADEMIC YEAR, 1895-96.

I.—ORDINANCE NO. 57, GENERAL NO. 19—REGULATIONS AS TO BURSARIES, SCHOLARSHIPS, AND FELLOWSHIPS.

* * * * * * * *

The Commissioners statute and ordain with regard to Bursaries, Scholarships, and Fellowships which have taken effect prior to the 30th day of August 1864, as follows:—

GENERAL.

I. For the purposes of this Ordinance, Bursaries in the Faculty of Arts (hereinafter referred to as Bursaries in Arts) shall be deemed to be the Bursaries now attached to the said Faculty by Deed of Foundation or by custom.

II. Bursaries in Arts heretofore tenable for four years shall continue to be so tenable, provided that, if the holders graduate after the three years' course, they shall only retain their Bursaries during the fourth year of tenure if they shall engage in a course of study approved by the Senatus Academicus in subjects included in the Curriculum for Degrees in Arts or in Pure Science.

III. All Bursars in Arts, subject to the provision as to the fourth year of tenure contained in the immediately preceding section, shall attend in each year at least two classes qualifying for Graduation in Arts, and shall duly perform the work of these classes: Provided (1) that, for the purposes of this section, the classes known as Middle Classes, so long as the same exist, may be attended in place of classes qualifying for Graduation; and (2) that it shall be in the power of the Senatus Academicus, with the approval of the University Court, to permit such Bursars as they shall from time to time select to attend classes qualifying for Graduation in Pure Science in place of classes qualifying for Graduation in Arts.

IV. It shall be in the power of the Senatus Academicus to suspend or deprive a Bursar, Scholar, or Fellow on the ground of misconduct, or, if it think fit, on the ground of his failure to obtain Class Certificates, or to produce such other evidence as may be required that he is prosecuting his studies in a manner satisfactory to the Senatus Academicus.

V. Bursaries in Divinity heretofore tenable for four years shall continue to be so tenable, provided that, if the holders graduate after the three years' course, they shall only retain their Bursaries during the fourth year of tenure if they shall engage in a course of study in Divinity approved by the Senatus Academicus.

VI. In the case of a Bursary, Scholarship, or Fellowship not in the gift of a patron becoming vacant by forfeiture or otherwise before the expiry of the period of tenure, it shall be in the power of the Senatus Academicus, with the approval of the University Court, to determine as to the disposal thereof, or of the income thereof, during the remainder of the said period.

VII. Any Bursary tenable in several Faculties successively shall not be attached to any one of such Faculties in any year other than a year in which in ordinary rotation it would have been attached to such Faculty.

VIII. It shall be in the power of the Senatus Academicus to require, as a condition of tenure, any holder of a Scholarship or Fellowship who is a Graduate to engage in teaching within the University or to conduct Tutorial Classes, unless he shall satisfy the Senatus Academicus that he is pursuing special higher studies, or that he is engaged in original research.

IX. Each Examiner at competitions for Bursaries, Scholarships, or Fellowships shall receive suitable remuneration, and it shall be in the power of the University Court to charge the funds of Bursaries, Scholarships, or Fellowships with the necessary expenses of examination.

Open Bursaries.

X. (1) The subjects of the Examination for Open Bursaries in Arts of the first year shall be the subjects prescribed for the Preliminary Examination in Arts instituted by Ordinance No. 11 [General No. 6—Regulations for Degrees in Arts], Section III. The Examination shall be taken at the Spring or the Autumn Preliminary Examination, according as the University Court shall determine, and shall be upon the same papers: Provided that the Senatus Academicus may, for purposes of competition, subject Candidates to any further test that may be deemed necessary.

(2) Candidates for such Bursaries who select in the Bursary Competition Examination, Latin, Greek, or Mathematics, shall, for the purposes of the Competition, take the papers of the Higher Standard in those subjects: Provided that nothing herein contained shall prevent a Candidate passing the Preliminary Examination if he complies with the provisions of Ordinance No. 11 [General No. 6—Regulations

for Degrees in Arts], and Ordinance No. 44 [General No. 16—Regulations for Degrees in Arts Supplementary to Ordinance No. 11].

(3) No Candidate shall, except as hereinafter provided, obtain a Bursary in Arts who shall not have passed the Preliminary Examination in Arts: Provided that it shall be in the power of the Senatus Academicus, with the approval of the University Court, to admit to a Bursary in Arts a Candidate who shall have passed in at least three subjects of the Preliminary Examination, on the condition that he shall not retain the Bursary unless he shall have passed in all the subjects not later than the Second Preliminary Examination after the date of his admission as Bursar: Provided also that this power shall lapse after the expiry of seven years from the date hereof unless it be renewed by Ordinance.

XI. It shall be competent for the Senatus Academicus, with the approval of the University Court, from time to time to make regulations as to the conditions under which persons shall be eligible to compete for Bursaries of the first year in the Faculties of Arts and Science: Provided always that no Student, who has during a Winter or Summer Session attended any class qualifying for Graduation in the said Faculties in any Scottish University, shall be eligible to compete for such Bursaries.

XII. (1) In determining the marks to be assigned to the several subjects of the Bursary Competition Examination, English, Latin, Greek, and Mathematics shall each have assigned to them double the marks assigned to any other subject.

(2) Candidates may select not more than five subjects for examination from the subjects of the Preliminary Examination in Arts, and no Candidate shall be credited with marks in any subject in which he has not obtained such proportion of the total number of marks assigned to that subject as the Senatus Academicus may from time to time prescribe.

XIII. The Senatus Academicus, in determining the results of the Bursary Competition Examination, may award Bursaries in Arts of the first year in respect of exceptional distinction in any one branch of study: Provided that this power shall not be exercised with regard to more than two Bursaries in any one year.

XIV. Bursaries open for competition to Students entering on their first session of attendance in the Faculty of Medicine shall be tenable only by those Students who have passed the Preliminary Examination in Medicine, or who have been exempted therefrom in accordance with the provisions of Ordinance No. 16 [Edinburgh, No. 1—Regulations for Degrees in Medicine], and who have not attended any class qualifying for graduation in Medicine: Provided always

that the last-mentioned condition shall not be held to exclude a Candidate who may have attended the class of Physics, Chemistry, Botany, or Zoology, otherwise than as part of a graduation course in Medicine.

Restricted and Preferential Bursaries.

XV. Candidates for Bursaries in Arts which are not awarded by open competition shall present themselves for the Preliminary Examination in Arts prescribed by Ordinance No. 11 [General No. 6—Regulations for Degrees in Arts], Section III., and no Bursary shall, except as hereinafter provided, be awarded to any Candidate who shall not have passed the Preliminary Examination in Arts: Provided that it shall be in the power of the Senatus Academicus, with the approval of the University Court, to admit to a Bursary in Arts not awarded by open competition a Candidate who shall have passed in at least one subject of the Preliminary Examination, on the condition that he shall not retain the Bursary unless he shall have passed in all the subjects not later than the Second Preliminary Examination after the date of his admission as Bursar.

XVI. In the case of a Bursary, Scholarship, or Fellowship in the gift of a patron, including bodies corporate and not corporate, becoming vacant by forfeiture or otherwise during the period of tenure, the Senatus Academicus shall forthwith give notice of the vacancy to the patron, who may, within such time as the Senatus shall fix, appoint a qualified Student to fill the vacancy; and if he fail to do so within such time, the Senatus Academicus may select a deserving Student to fill the vacancy until the next Preliminary Examination at which Bursaries are awarded, when the patron's right to present shall revive.

XVII. On the occurrence of a vacancy in any Bursary in the gift of a patron, including bodies corporate and not corporate, at the expiry of the period of tenure, the Senatus Academicus shall give notice of such vacancy to the patron of the Bursary and of the date fixed for the Preliminary Examination next ensuing at which Bursaries are awarded; and the patron may, if he think fit, submit to the Senatus the names of two or more Candidates eligible for such Bursary, who shall undergo an examination to be conducted by the Examiners for Open Bursaries in the University, and the result of the examination shall be communicated to the patron for his information, who shall thereafter present to the Bursary.

XVIII. In the case of a Bursary in the gift of a patron, including bodies corporate and not corporate, if no qualified person be presented before the date of the Preliminary Examination intimated in terms of

the immediately preceding section, the Bursary shall be open to unrestricted competition for that year; and in the event of no qualified person being presented as before provided at the beginning of the next academical year, the Senatus may either throw open the Bursary to unrestricted competition, or continue the same to the Student to whom it had previously been awarded: Provided that this section shall not apply in cases where the patron shall previously satisfy the Senatus Academicus that proper arrangements have been made for the selection of a Bursar.

MISCELLANEOUS.

XIX. In the case of Bursaries designed for poor Students, the Senatus Academicus shall satisfy itself that the circumstances of Candidates are such as to entitle them to the benefit of the endowment, and for this purpose the Senatus may require that a declaration be made by a parent or guardian, or by the minister of religion or schoolmaster, of each Candidate as the Court shall think fit.

XX. In the case of the Bursaries enumerated in the first column of the Schedule hereunto annexed, the preferences and restrictions set forth in the second column of the said Schedule shall be and are hereby cancelled, and shall be of no force or effect.

XXI. Nothing herein contained shall apply to any Bursary or endowment granted by any incorporation or society whose funds, capital, or revenue have been and are contributed and paid by the members of such incorporation or society by way of entry monies or other fixed or stated contributions.

XXII. The Senatus Academicus, with the approval of the University Court, shall prescribe the subjects of examination and the conditions of competition for Bursaries, Scholarships, or Fellowships, in so far as the same are not prescribed by Ordinance or by Deed of Foundation.

XXIII. The provisions of any Ordinance of the Commissioners under the Universities (Scotland) Act, 1858, in so far as inconsistent with the provisions of this Ordinance, are hereby repealed.

XXIV. This Ordinance shall come into force from and after the 1st day of January 1895, or as soon thereafter as it may be approved by Her Majesty in Council: Provided that nothing herein contained shall extend to, or affect the interests of, any person holding a Bursary, Scholarship, or Fellowship at the date of its coming into effect.

SCHEDULE REFERRED TO IN SECTION XX.

Date.	Name of Bursaries.	Restrictions or Preferences.
	EDINBURGH:—	
1714	Brown, ...	1. Restrictions to a Protestant Pole. 2. Preference to the name of Brown, natives of Scotland.
1702	Bryson, ...	Preference to (1) kinsmen of the donor, (2) the name of Bryson, (3) those from or educated within the Parish of Dunbar.
1734	Dundas, ...	Preference to (1) Founder's kin, (2) the name of Dundas.
1768	Fraser, ...	Restriction to the name of Fraser.
1809	Grant, ...	Restriction to the name of Grant.
	Gray (Scholarships),	Preference to (1) name of Gray, (2) those born in Parishes of Mid-Calder or Kirknewton.
1838	Hepburn, ...	Preference to students from Presbyteries of Weem and Auchterarder.
1784	Hume, ...	Preference to (1) Founder's kin, (2) the name of Hume, (3) natives of or those educated in Dunbar.
1852	Lennie, ...	Preference to the name of Lennie, Paton, Stobbie, or Ronaldson, and to persons from the country who have been engaged in trade, and exclusion of Roman Catholic or Jesuit.
1678	Penman (Bailie John),	Preference to kinsman of Founder.
1809	Stuart, ...	Preference to the name of (1) Stuart, or (2) of Simpson.
	BURSARIES TENABLE AT ANY UNIVERSITY:—	
1856	Sharp, ...	Preference to (1) the name of Sharp, (2) the name of Sim.
1837	Dow, ...	Restriction to scholars natives of the Parish and educated at Parochial School of Kirkmichael, Perthshire; whom failing, to scholars natives of the Parish and educated at the Parochial School of Moulin.

II.—Ordinance No. 56 [Edinburgh, No. 10—Regulations for Degrees in Medicine, Supplementary to Ordinance No. 16].

The Commissioners under the said Act statute and ordain, with regard to the University of Edinburgh, as follows:—

I. The expression "Pharmaceutical Society," in Section VII., Sub-section 9 of the said recited Ordinance, shall mean and include the Pharmaceutical Society of Great Britain and the Pharmaceutical Society of Ireland.

II. The expression "an establishment recognised by the Pharmaceutical Society," in the said Section VII., Sub-section 9 of the said recited Ordinance, shall mean the establishment of any chemist and druggist or pharmaceutical chemist of Great Britain, or any pharmaceutical chemist of Ireland, who is registered in the Books of the Pharmaceutical Society of Great Britain or of the Pharmaceutical Society of Ireland respectively.

III. If a candidate for the Degrees of Bachelor of Medicine and Bachelor of Surgery have completed in a University of the United Kingdom a course of study and passed an examination in Botany, Zoology, Physics, or Chemistry qualifying for a Degree in Science or in Arts, he shall be held to have passed the examinations prescribed by Section XI. of the said recited Ordinance in such subject or subjects.

IV. If a candidate have obtained a Degree in Science or in Arts in any University other than a University of the United Kingdom, granted in either case after a course of study and an examination in Botany, Zoology, Physics, or Chemistry, it shall be in the power of the University Court to exempt such candidate from the examinations in such subject or subjects prescribed by Section XI. of the said recited Ordinance; provided that the course of study and the standard of examination in each case are satisfactory in the judgment of the Senatus Academicus.

V. The provisions of Section X. of the said recited Ordinance shall not have effect except where the University Court shall allow their application after a report by the Senatus Academicus, setting forth special grounds therefor in the case of any candidate named in the report.

VI. Bachelors of Medicine and Masters of Surgery of the University of Edinburgh, who have graduated under the regulations in force before the 5th day of August 1892, may proceed to the Degree of Doctor of Medicine under the provisions of Section XXI. of Ordinance No. 16 [Edinburgh, No. 1.—Regulations for Degrees in Medicine], in the same manner as if they held the Degree of Bachelor of Surgery.

VII. This Ordinance shall come into operation from and after the date of its approval by Her Majesty in Council.

III.—Ordinance No. 135 [Edinburgh, No. 23—Regulations for Degrees in Science in Public Health, Supplementary to Ordinance No. 35].

I. If a candidate for the degree of Bachelor of Science in Public Health have attended in the University of Edinburgh or any other Scottish University, in addition to the course of lectures in Physics qualifying for graduation in Medicine, such further course in Physics as the Senatus Academicus, with the approval of the University Court, shall deem necessary, and such a course of lectures in Geology, extending over not less than three months, as the Senatus with the like approval shall deem sufficient and appropriate, he shall be held to have complied with the provisions of section iv. of the recited Ordinance.

II. In lieu of the course of instruction, consisting of fifty lectures in Public Health, required by section v. of the recited Ordinance, candidates for the degree of Bachelor of Science in Public Health shall attend two separate courses in Public Health, each consisting of forty lectures at least; one of these courses shall deal with Medicine, and the other with engineering, each in its relation to Public Health, in such manner as the Senatus Academicus with the approval of the University Court shall determine.

III. The examination in Sanitation, provided for under section vii. of the recited Ordinance, shall include Reports by the candidates on Dwellings, Workshops, Hospitals, and Sanitary Schemes generally.

IV. This Ordinance shall come into operation from and after the date of its approval by Her Majesty in Council.

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